

13
E. O. Ulrich
Ozarks of Missouri and Arkansas.
Notebook 13.
1906.
Loc. 274 (Rolla)

13

U. S. GEOLOGICAL SURVEY
TRAVERSE BOOK

9-904

June 26, 1907 .

TENTATIVE ACTION OF COMMITTEE ON GEOLOGIC NAMES.

Mr. Ulrich's work in Ozark region, Mo.-Ark.

Ordovician

Kimmswick limestone

----- chert ("Auburn rejected; preoccupied.) Occurs in eastern part only.

Izard limestone (southern part) - Plattin l.s.) of eastern
Joachim l.s. (part

St. Peter sandstone

Everton limestone, local zinc-bearing rocks at top of "Yellville."

(Yellville formation not decided upon)

Jefferson City limestone

Roubidoux formation

Bolin sandstone member (northwestern part only)

Gasconade formation

Gunter sandstone member (northwestern part only)

Proctor limestone

Eminence limestone

Potosi limestone

Elvins formation - basal part of Potosi limestone and Potosi slates and conglomerates of Nason; also - "Edgewise" beds.

Bonne Terre limestone

La Motte sandstone.

M. G. Wilmarth.

ANY PERSON

finding this book will confer a favor by pasting the following addressed label on the outside and depositing it in the nearest post office.

Department of the Interior,
U. S. GEOLOGICAL SURVEY.
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To the Director of the

United States Geological Survey,

Washington, D. C.

6-241

E. O. Ulrich.

Field Season 1906

Ozarks of Missouri
and Arkansas.

E. O. Ulrich.

Fulton To Portland (on No. 100) then NE to Danville.
Danville to Big Spring then up Bear Creek to Jonestown.
By general mail to Warrenton, then drive S. down
Charlton creek & north up Dry Fork.

St. Louis - vicinity of road to Pacific.

Silica and smelt on Platten creek.

Rail - St. Louis to St. Louis
 Drive St. Lou. to Desoto
 " Desoto to Festus + return
 " Desoto to Sullivan
 2nd day Sullivan to Jeff. City via train
 2 days vicinity of Jeff. City
 Drive Fulton to Portland to Danville
 " Danville to Big Spring to Jonestown

John F.

...THE CITY HOTEL...

D. A. FAIRLEY, Proprietor

ROOMS NEWLY FURNISHED
PERFECT IN APPOINTMENT

Strictly First Class

South Side Public Square. Phone 25

Rates \$2.00 Per Day

Route after Aug. 12th 1906
Versailles, Mo., 190

- Aug. 13. Versailles, via Gravois Mills, to Eldon.
- " 14 Eldon to Tuscumbia and if possible drive on to Ramsey P.O. (use Eldon team to Dixon)
(Or Eldon to Baynell + then to Tuscumbia, practical to Iberia.)
15 Tuscumbia to Ramsey + beyond of Iberia.
- " 15 or 16. Ramsey to Iberia, then east to Bobin creek sandstone outcrops + then on to Dixon.
- " 16 or 17 Dixon to Rolla.
- " 18 or 19 Rolla to Steelville
- " 19 or 20 Steelville to Potosi
- " 20 or 21 Potosi to Ironton or Centerville
- " 21 or 22 Ironton to Lutesville
- " 23 Lutesville to Cape Girardeau
- " 24 Between Cape + Thebes
Send Dickey to ^{Blanch Rock} Smithville, Ark. + later to Reynolds, Tenn.
Rail from Cape at Thebes to ~~Douglas~~ then drive east to Doniphan
~~Doniphan to Grandon~~
Doniphan to Poplar Bluff
~~Poplar Bluff~~ by rail to Potosi or St. Genevieve
or St. Genevieve to Potosi or Dr. Seta
Potosi to Sullivan
Sullivan to New Haven or Hermann.
about Aug 29 or 30. Hermann to Jeff. City by rail.
Vicinity of Jeff. City + south to Moccasin River
Jeff. City by rail to Springfield + return to Jeff. City
Jeff. City north to New Bloomfield or Fulton
Jeff. City n. to Clatterback ford of Cedar Creek, then east to Hartsburg
It return to Jeff.

Fulton to Portland (on Mo. Riv) then NE to Danville.
Danville to Big Spring then up Bear Creek to Junction
of junction rail to Warrenton, then drive S. down
Charette creek or north up Dry Fork.

St. Louis - vicinity of & west to Pacific.

Silica and south on Platten creek.

- Rail - St. Louis to Ste Genevieve
- Drive Ste. Gen. to Dr. Solo
- " Desoto to Festus & Nelson
- " Desoto to Sullivan
- 2 or 3 days " Sullivan to Jeff. City via Linn
- 2 days vicinity of Jeff. City
- Drive Fulton to Portland to Danville
- " Danville to Big Spring to Junction
- " Junction of Warrenton

One full month

- Rail to St. Louis to Cuba to Salem
- Drive Salem to Houston
- " Houston to Cabool
- Rail to Springfield to Marshfield
- Drive Marshfield to Lebanon
- 3 days " Lebanon to Houston to Eminence or Winona
- " Winona to West Plains
- " West Plains to Udall on N. Fork White River
- " S E To ^{Salem, Fulton Co. Ark.} days ~~drive~~
- " S E from Salem, to Evening Shade, Sharp Co. Ark.
- " Evening Shade S. to Polk Bayou & return via St. Clair
- " " " to ^{junction of} Smithville and ^{junction} Black River
- " Lubbock to Thayer

Stewed Tomatoes, 15c. Sardines, 35c.
 Asparagus on Toast, 25c. Stewed Mushrooms, 25c.
 New June Peas, 15c. Stewed Corn, 15c.
 Boston Baked Beans, 25c.
 Oatmeal and Cream, 20c. Malta Vita, 20c.
 Griddle Cakes with Maple Syrup, 20c.
 Sandwiches, Ham or Tongue, 15c.
 Milk Toast, 20c. Butter Toast, 15c.
 Bread and Milk, 20c. Hot Rolls, 10c.
 Coffee, Tea, Milk or Cocoa, 10c.
 Horlick's Malted Milk, 10c.
 Pie, 10c.
 Ice Cream, 15c. Cake 10c.
 Preserved Raspberries, Peaches, Figs, Blackberries, Cherries, 20c.
 Club or Roquefort Cheese and Bent's Crackers, 20c.
 Soups, Game, Steaks, Chops,
 Fruits,
 Tapioca Pudding 20c.
AND ALL ARTICLES IN SEASON.
Everything Cooked to Order.
Imported and Domestic Cigars.
 J. G. WALBER, C. H. ROBERTS,
 Asst. General Manager, Act'g Supt. Dining Car Service.
 CINCINNATI, O. CINCINNATI, O.

Robbery honey combed chard
 Stungy honey combed chard
 Flat Jamellen Cypst.
 Macaroni Cypst.
 Cypst. sauce.
 Pudding dinary.
 4-1/2 inch macaroni Cypst.

Small sparkling chard 50c.
 Large sparkling chard 50c.
 Stungy honey combed chard 50c.
 Flat Jamellen Cypst. 50c.
 Macaroni Cypst. 50c.
 Cypst. sauce 50c.
 Pudding dinary 50c.
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 Pudding dinary 50c.
 4-1/2 inch macaroni Cypst. 50c.

Marston (Co) 0-100
 Everton 0-100+
 Lower S.P. 0-20
 0-200

Ozarkian

Kiangua chert group 75-300
 series 50-150

St. Francis series
 Lower typical

Ozarkian

Jan 1906

Bonita Terra
 La Motte 35

Carboniferous

800	100	240
100	240	440
240	100	250 + Potomac
100	440	100 + etc

Ropy honey combed chert
 stringy honey combed chert

Flint lamellar Crypt.

Massive Crypt.

Cryptogam.

Pebble drusy.

1/4 - 1/2 inch mamillary Crypt.

Jeff.
 Gray dol. & cotton r.
 Cryptogam
 occasionally ss. lenses
 common white chert
 Dol. & chert
 Sandstone lens
 Small green chert
 Stringy honey combed
 Flat loose lam. Crypt.
 Mass. crypt. chert
 Green ss.
 Prater

Roubidoux
 succession
 Green ss.

Yadonville in old sketch
About midway between
Stedville & Potomac
(east of Barrington)

Stedville

Base RR

Highway x

Van Buren

Yadonville
NW corner of Yadonville
Ch.

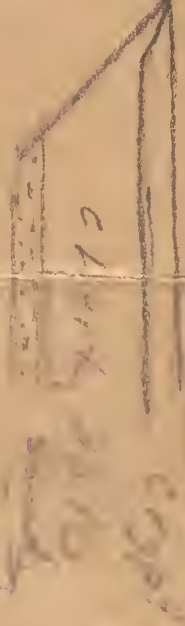
Base

Non-Chart 50' - 100'

Van Buren

Garth

Yadonville



Van Buren

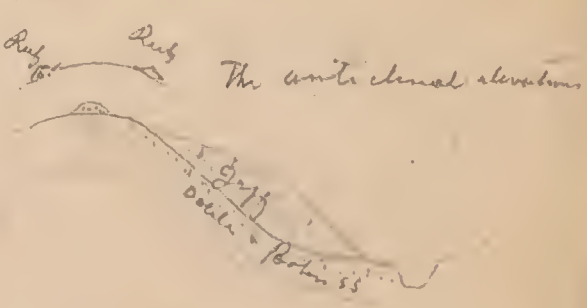
Garth

Rolla, Mo. July 19th 1906. North East to North of town

Dr. E. R. Buckley's house & farm is situated on the N. East edge of town
 east on the Eastern slope of the divide between the Gasconade
 and Meramec rivers. The crest of the divide which passes in
 a N.E. direction through Rolla and then trends more northerly
 extends ^{to} top of Reubens dome. Generally the top consists of residual
 Bolin ss. and ^{the overlying} platy, white congl., with occasional pieces of Jeff. chert.
 Here and there Jeff. chert is separated from the platy white of Reubens by an irregular
 thin bed of siliceous, green or purple, clay (fire clay). (Compare clay at Versailles, in center of
 R.R. cut, and at Forister). Occasionally this or a similar clay appears to underlie the
 ss. but was inclined to regard this position as due to settling during course
 of solution of valley rocks. Again the base of the Jeff. as in a low cut
 1/2 m. S of town, is a ^{massive} congl. layer resting unconformably upon the irregular, probably eroded surface of a layer directly overlying
 the stringy, uncrystalline, porous, white speckly dol. so generally quarried in this
 vicinity. (This bed is Jeff. according to Buckley) In other places the Bolin ss. horizon,
 consisting of dol. congl. and ss. interbedded, also the overlying white congl. (some generally
 thin bed always easily recognizable) is also occasionally the pebbly druse bed which
 underlies the Bolin ss., in all 15-20 ft of rocks, interposed between beds 1 or 2
 of shales.

Especially on the tops or just off the tops of the Bolin ss. residue seems to have been heaped into reef-like accumulations. These reefs appear to date from time of Jeff. supersequence. Similar reefs have been observed near or at the Jeff.-Reubens contact at various places and some of them doubtless date from that time. Others however may be much younger, - probably antedating Miss. & Pennsylv. accumulation but not St. Peter as believed by Buckley.

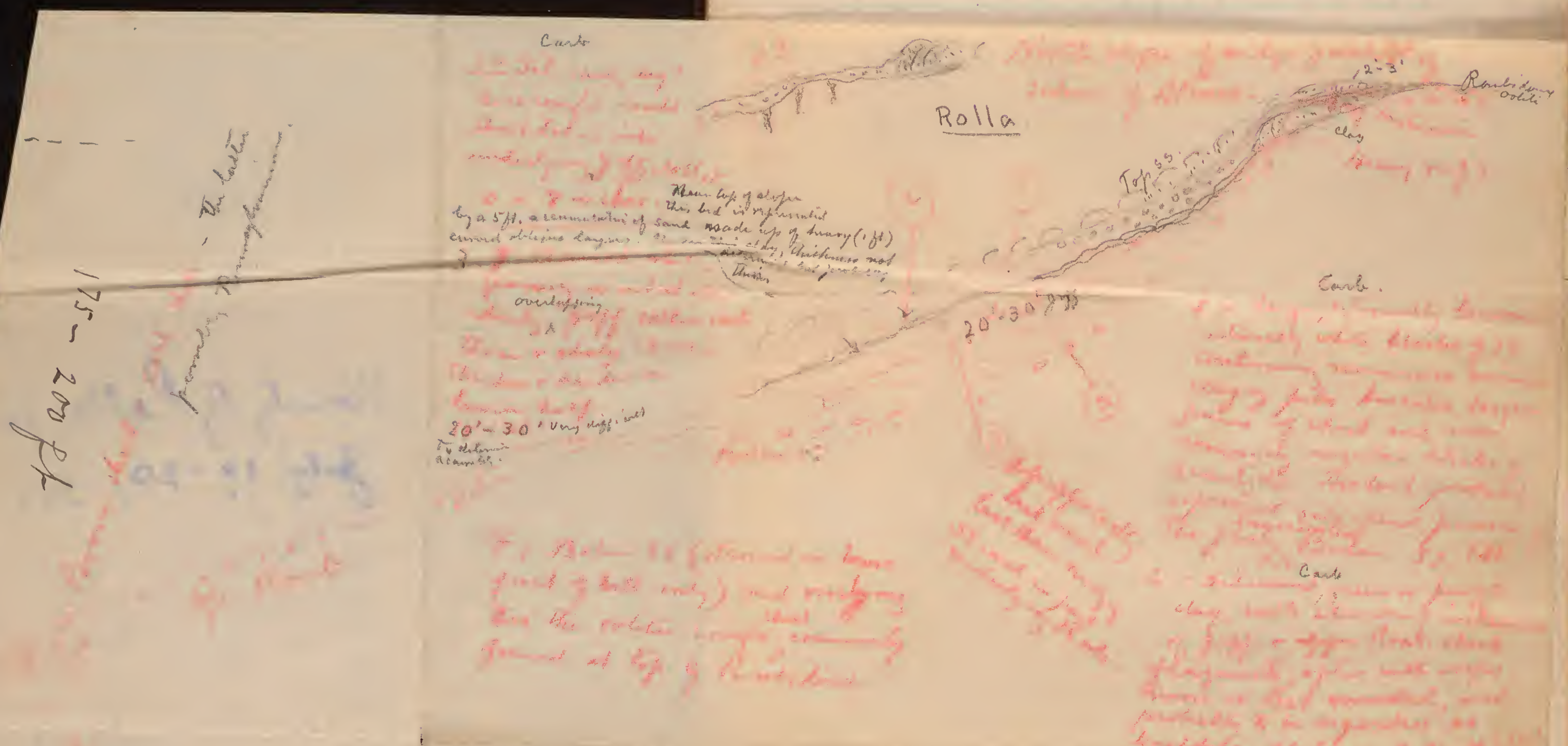
While the crest of the anticline (extreme tops of highest hills) exposes more or less eroded upper Reubens, the slope of hills both to N.W. & S.E. are, as indicated by sketch, skirted by remaining strips of Jeff. cotton rock. That these are really Jeff. is indicated less by dip than by lithology, apparent structure and fossils. Hoop. granular occurs in them. Cherts derived from these cotton rocks which are lithology and the fossils of the beds associated with the ss. beds at top of ridge, in bottom of valleys are the same as those found elsewhere in association with Bolin ss.



Rolla July 19-20 - 2

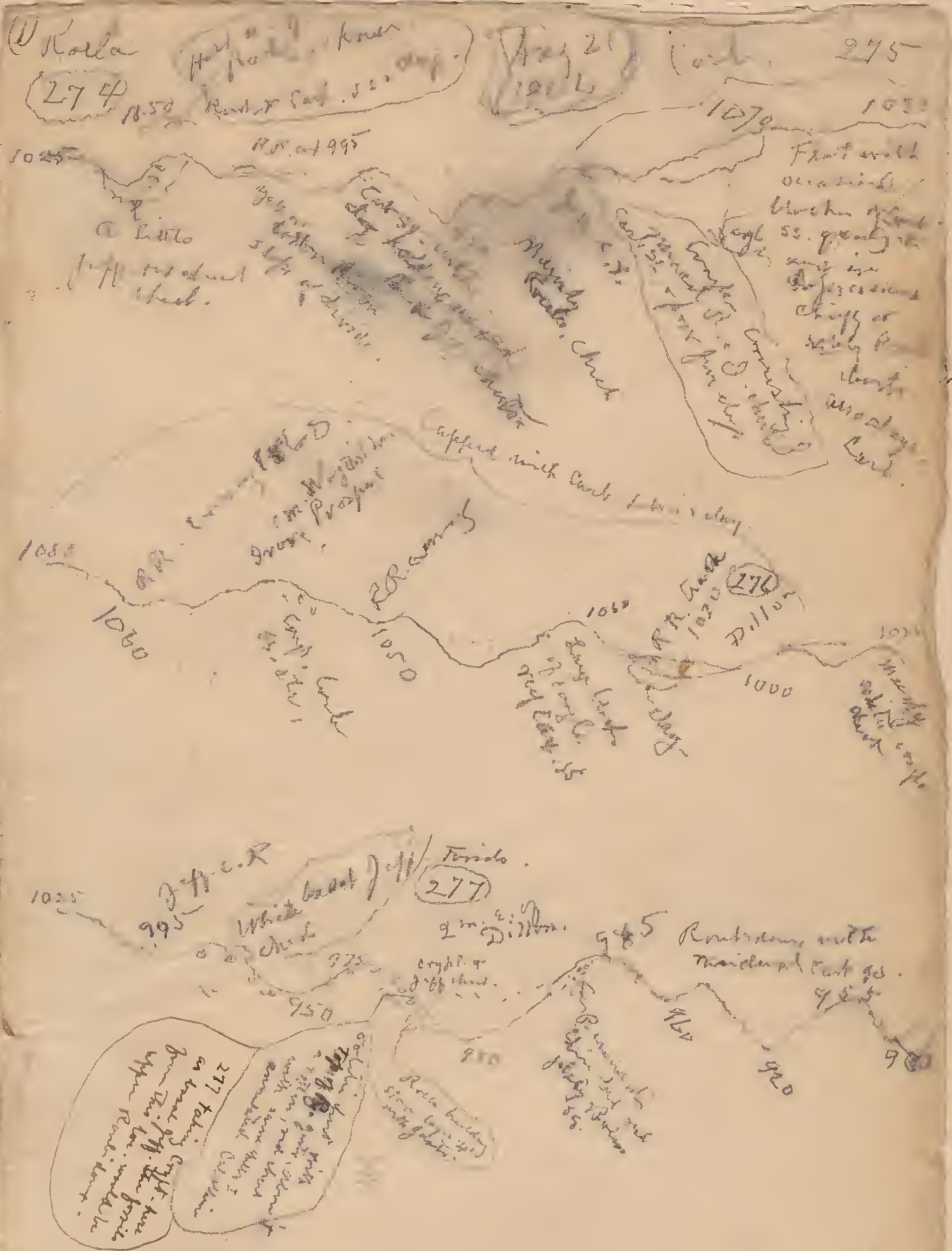
The large cut ~~just~~ $\frac{1}{2}$ m. S.W. of town consists chiefly of Cotton rock. It is undoubtedly Jeff. ch. and according to my interpretation lower Jeff. The cut shows the usual slight ^{local} folding generally apparent in the rocks of the ^{lower} Ozark series. It shows also the irregular bedding common in the ^{lower} Jeff. & Roundtop. Beneath one of these irregular contacts occurs an irregular ^{soft} clayey bed 1 ft. or less in thickness. In this are peculiarly ^{lenticular} smooth flints, 2"-6" in diameter. Similar smooth flints have been observed at numerous points west of Rolla & south of Cole Camp exposing mixed Upper Rock & basal Jeff. cherts.

Vicinity of Rolla, Mo.
July 19-20, 1906



Jeff. city evidently overlaps in this region on Roubidoux, and it is not by any means basal Jeff. The part that finally covered or came near top of old anticline is the bed filled with Cryptozoum shales. These are noticeably of lighter color than the dirty brown shales of the Roubidoux. Where the two shales come together, as on the west slope of the watershed where crossed by the Newberry road 1 mile or less west of town, the contrast in color is very striking. This contrast in color was noticed already on the high prairie country west of Versailles. It is to be observed further that the conditions at Rolla are decidedly like those prevailing in the vicinity of Versailles, where the Jeff likewise sometimes occurs not on top of the axis but on one or both slopes. Further, they both areas contain patches of the flint clay, and masses of ss. to be explained only by the reef theory. Finally, I have little doubt that both these ss. masses and the fire clays, especially when the latter are purple, are of Carboniferous age; whether of Mississippian or Pennsylvanian it is difficult to decide with the evidence at hand. If of Pa. age then the basin was either not deposited over the crest of their anticline or must have been removed prior to Pa. time. If of Mississippian then they must have been ^{near} when deposited - reefs etc.

175-200 ft
The latter
formed by
overlapping

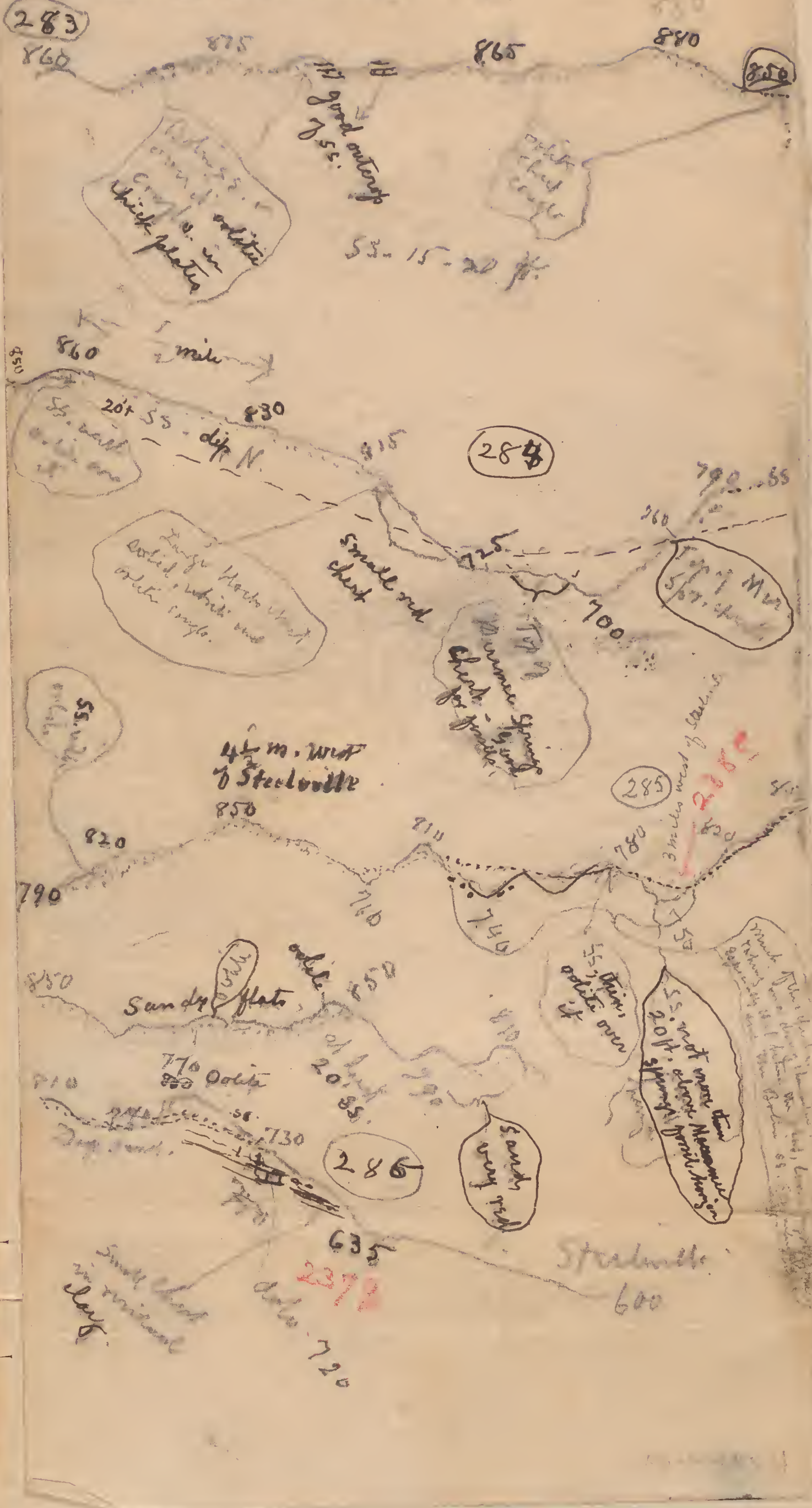


Rolla to Stuleville, via Meramec Springs. Aug 21.

(A)

cont on next p

Rolla to Steelville - 4.



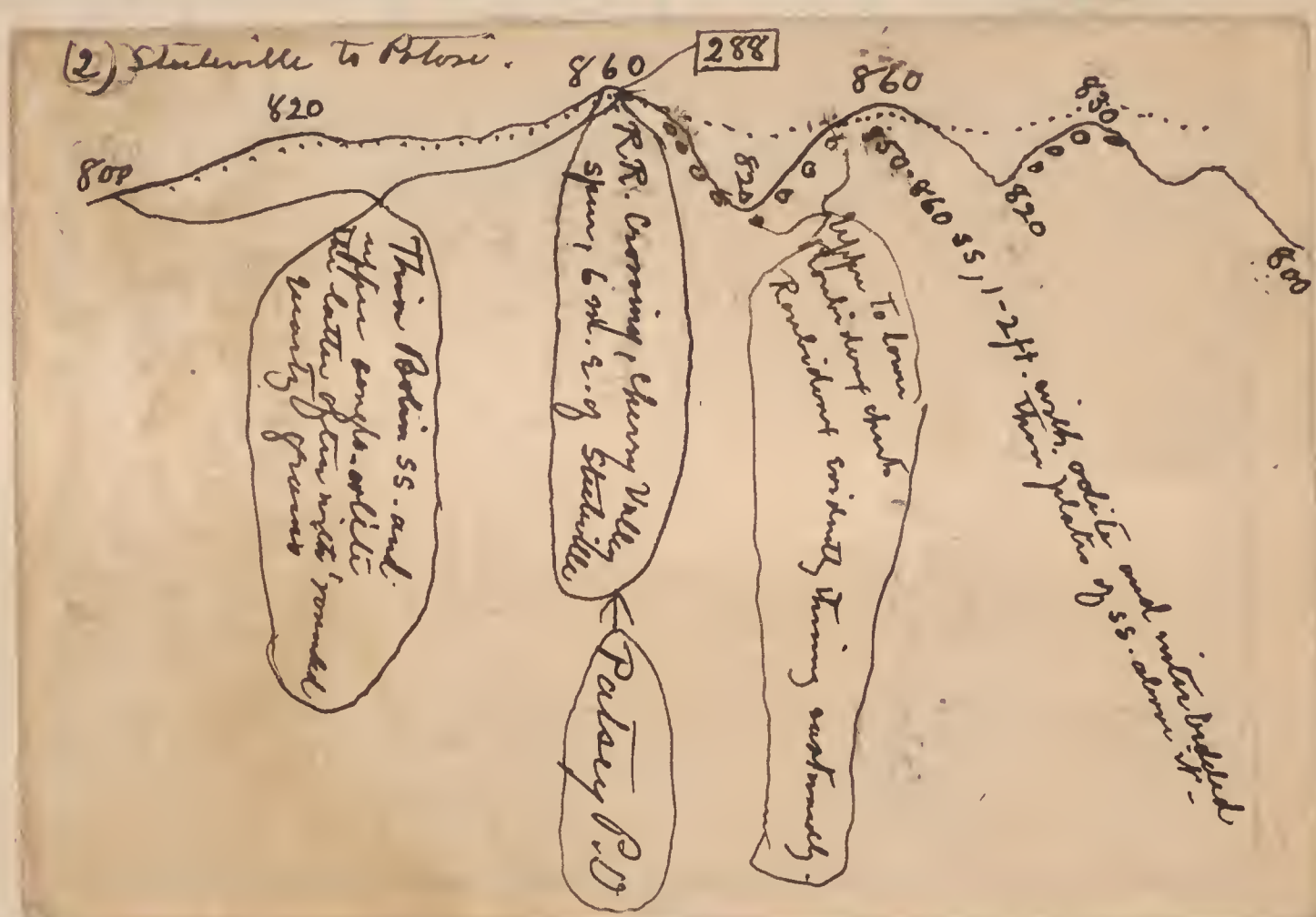
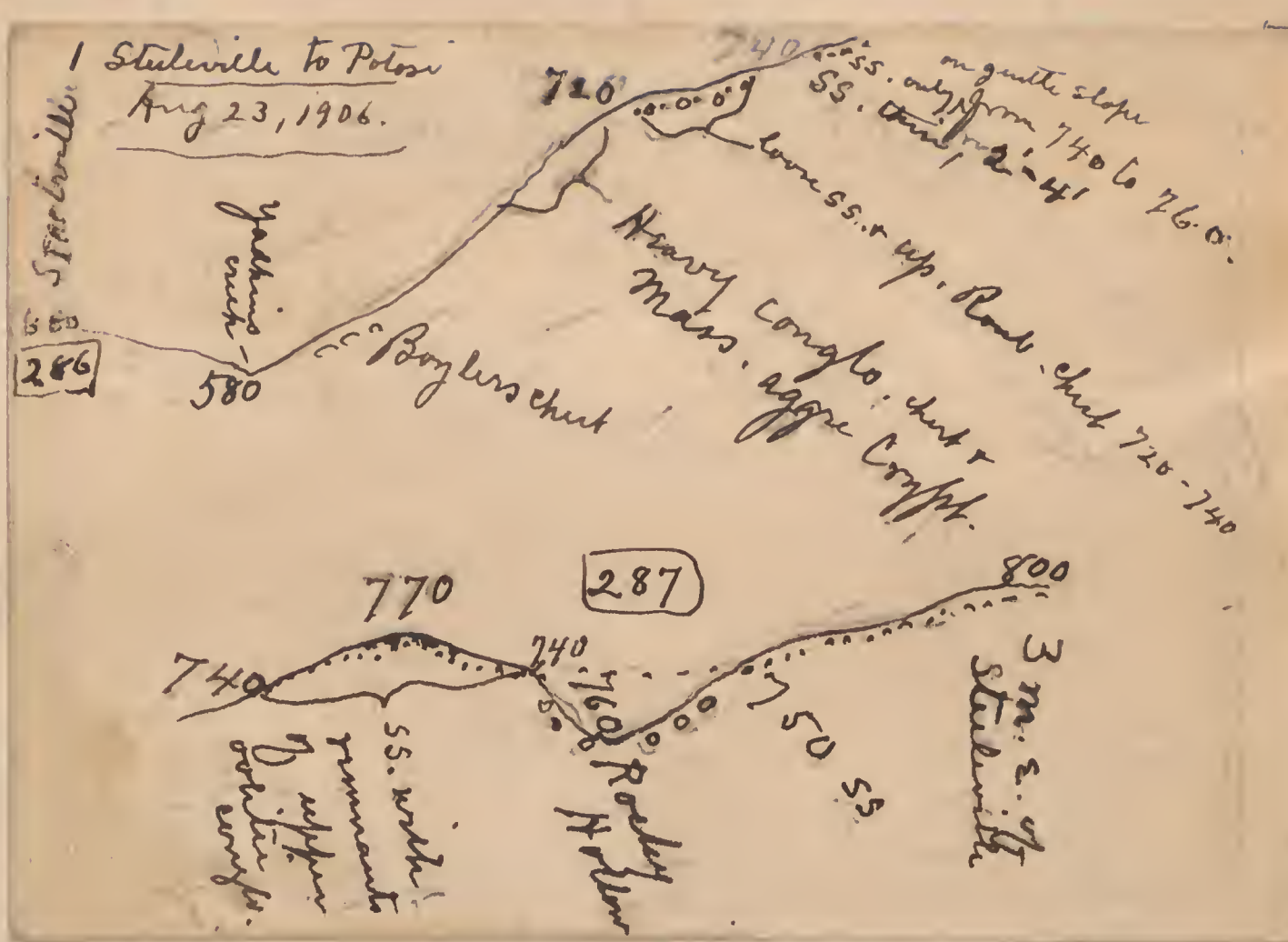
E Aug. 22nd 1906. W

- 760
- 20'-30'
- 720
- 700
- 695
- 685
- 675
- 665
- 635

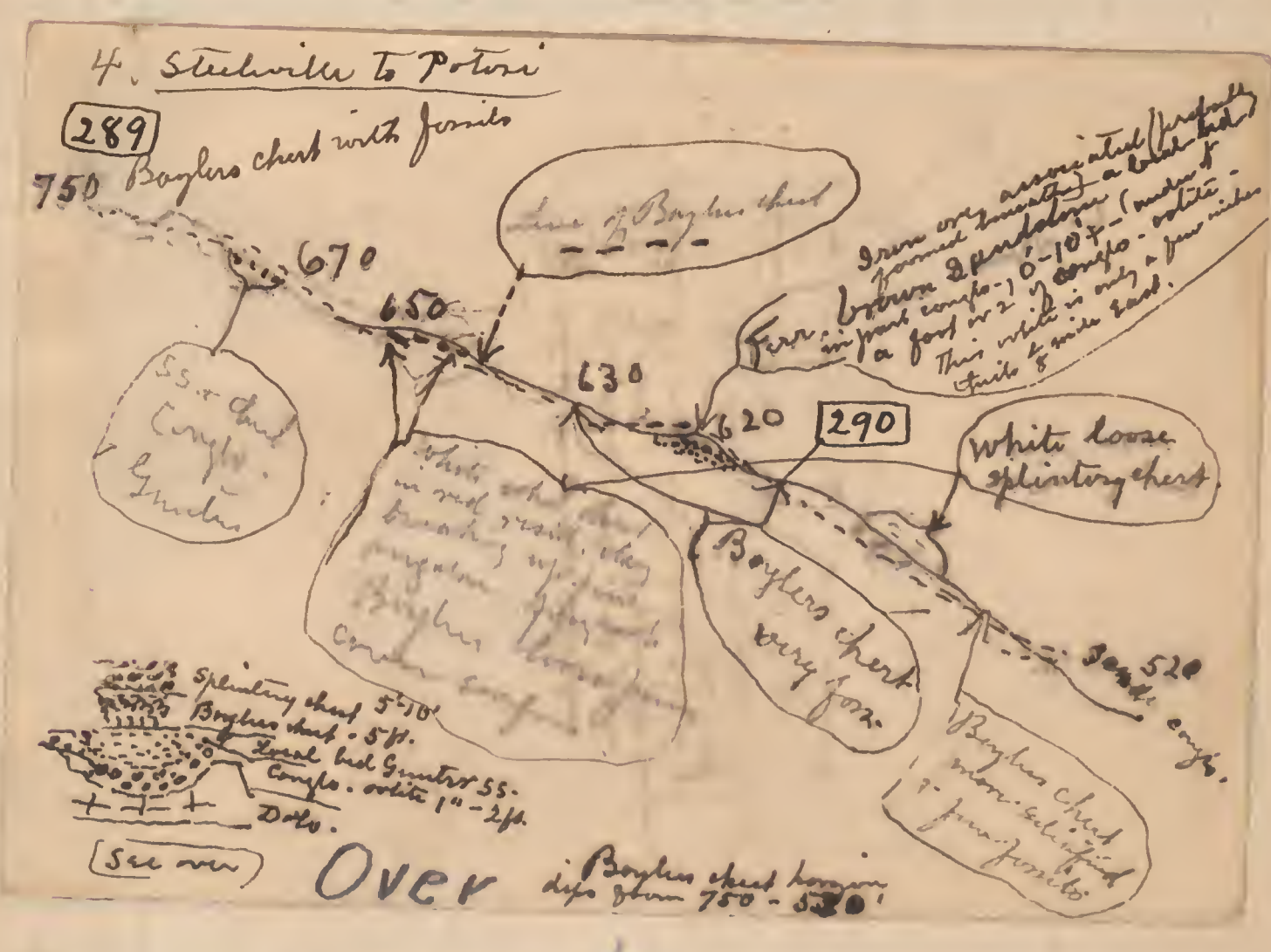
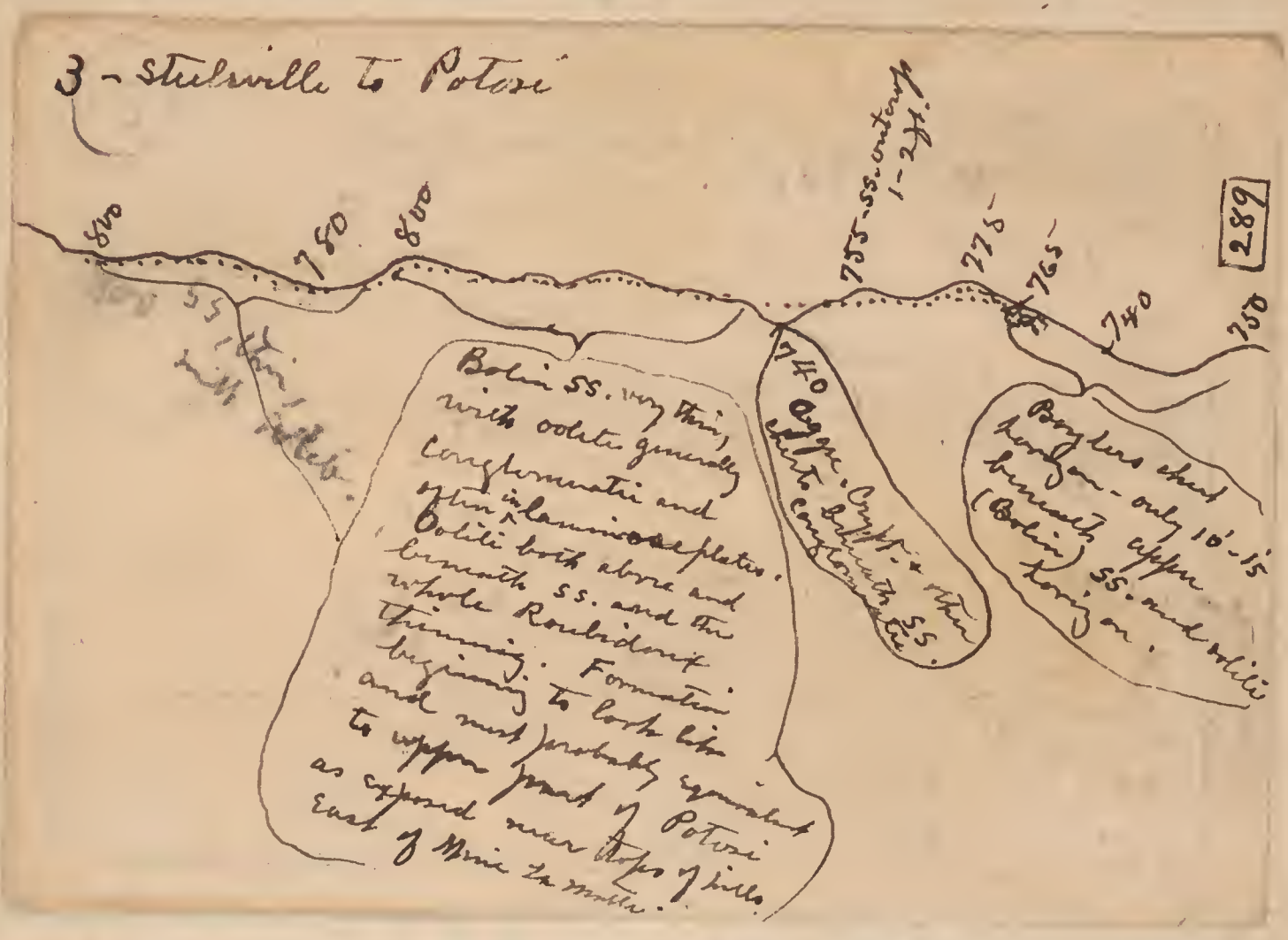
Loc 286
 2377
 2379
 2378
 2379

760
 20'-30'
 55
 Ranges 720
 700
 695
 685
 675
 665
 635

at outcrop rocks dip strongly east (downhill) probably because of near surface solution and bumping.



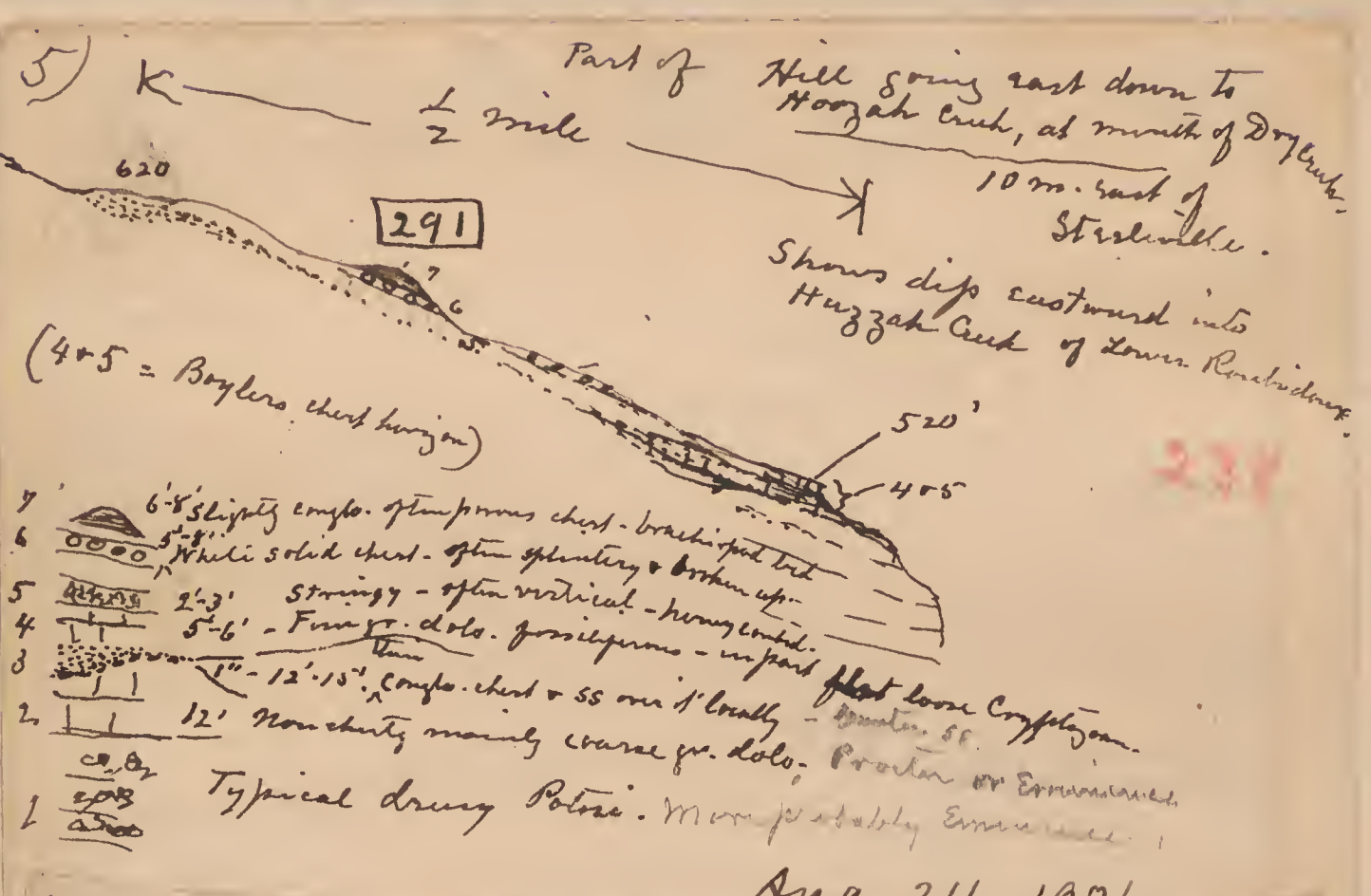
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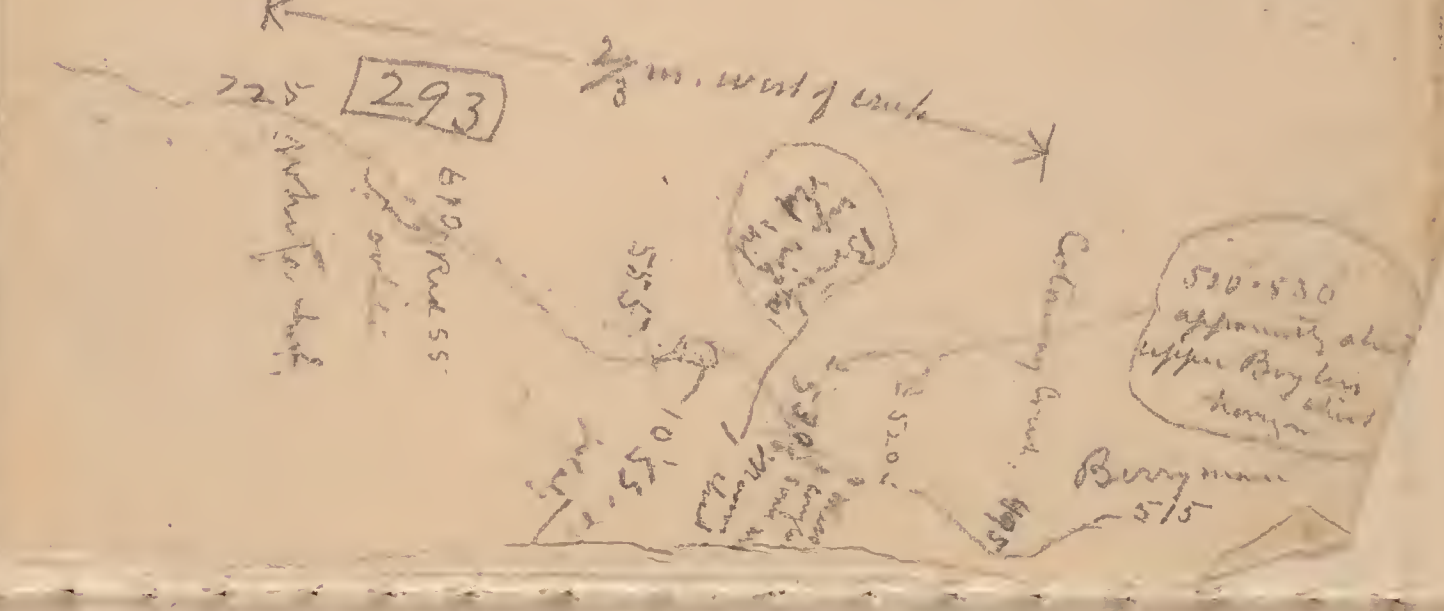
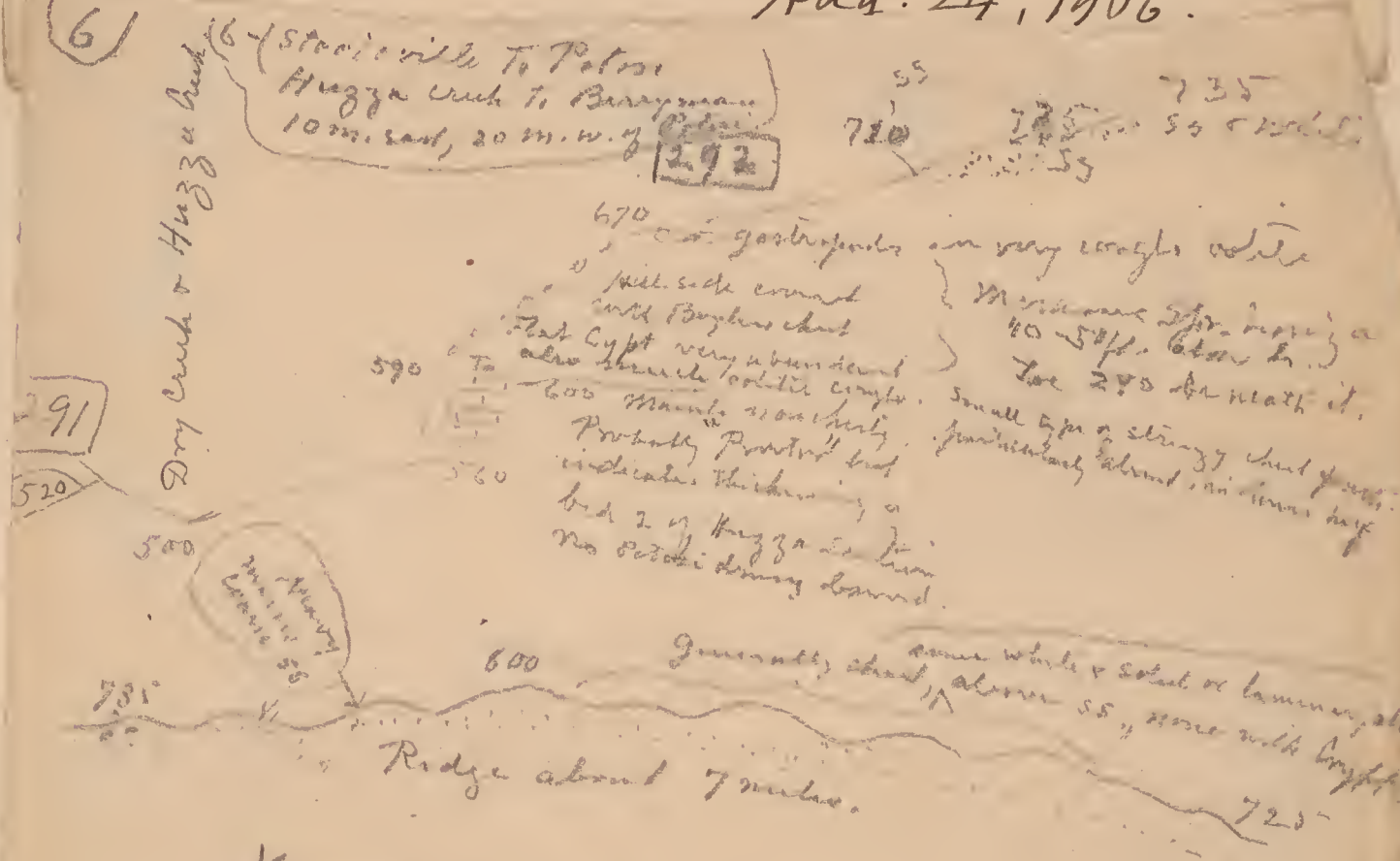
cont

1 Studeville to Potosi
 Aug 23, 1906.

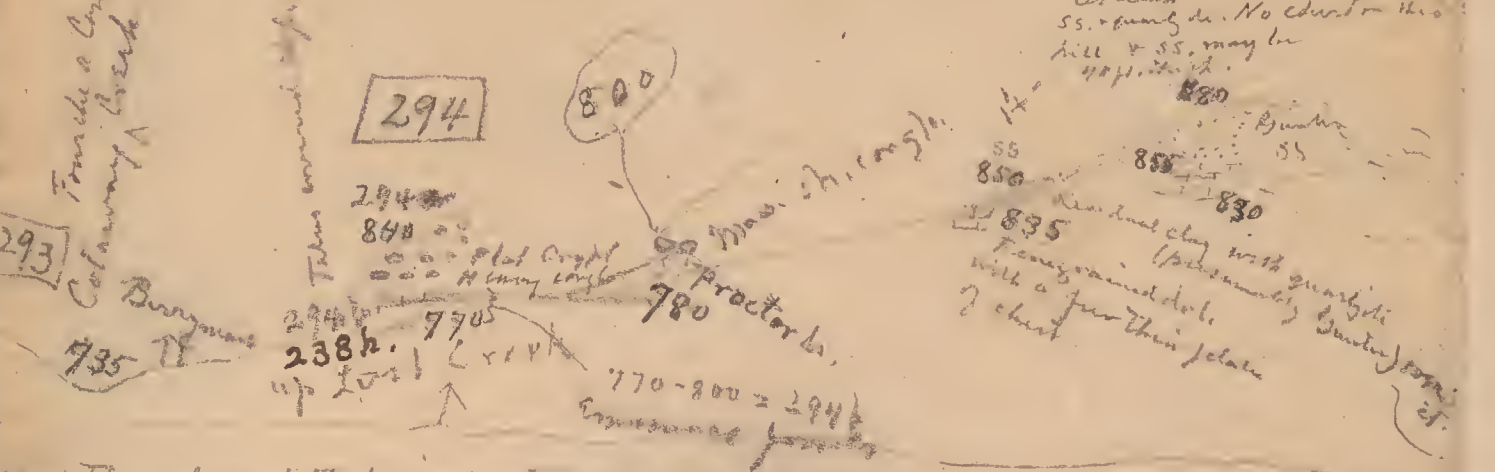
740 ss. on quite slope
 only from 740 ft.
 SS. thin bedded



Aug. 24, 1906.

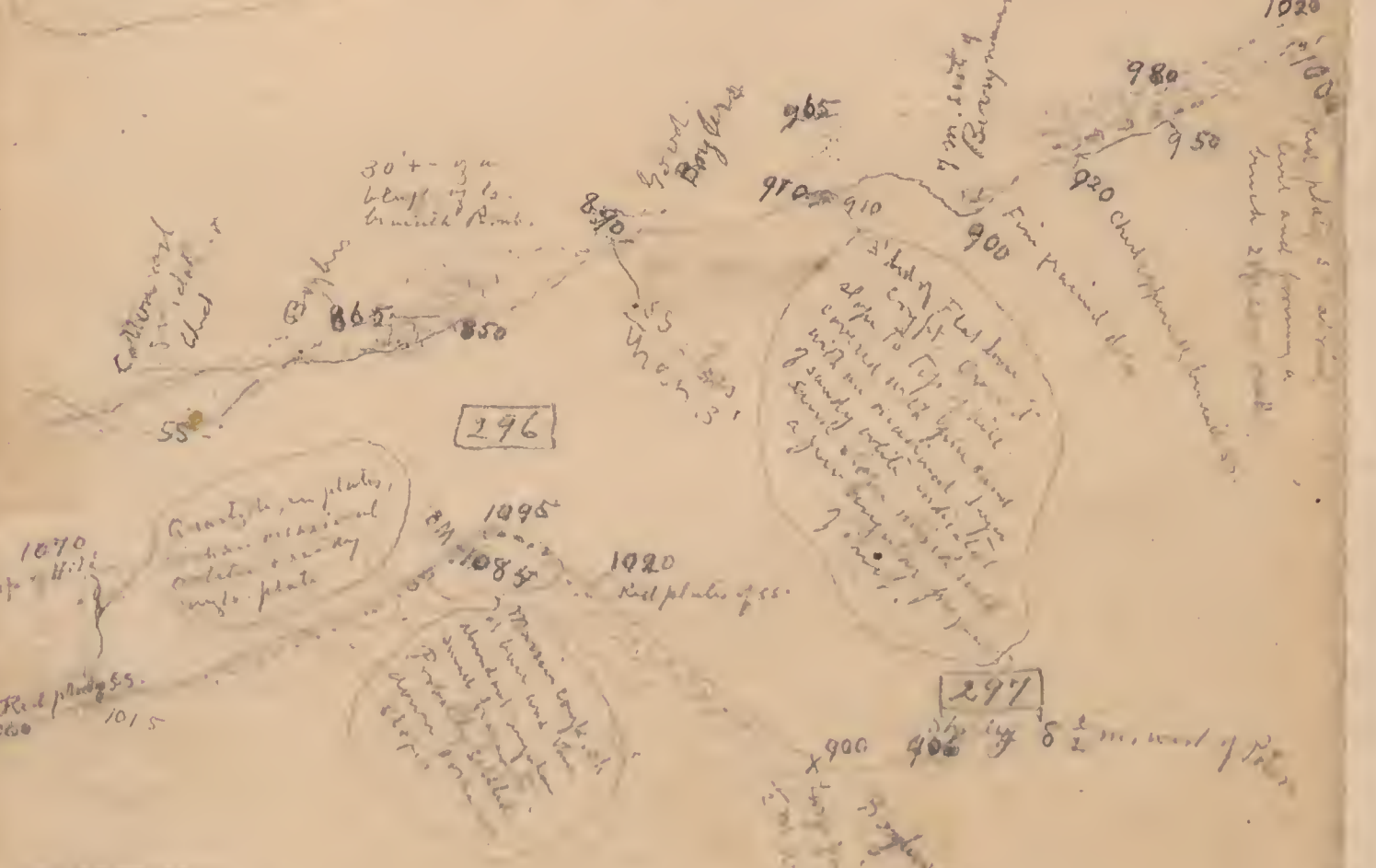


7 - Studeville to Potosi. (Barryman to Potosi - Aug. 25)



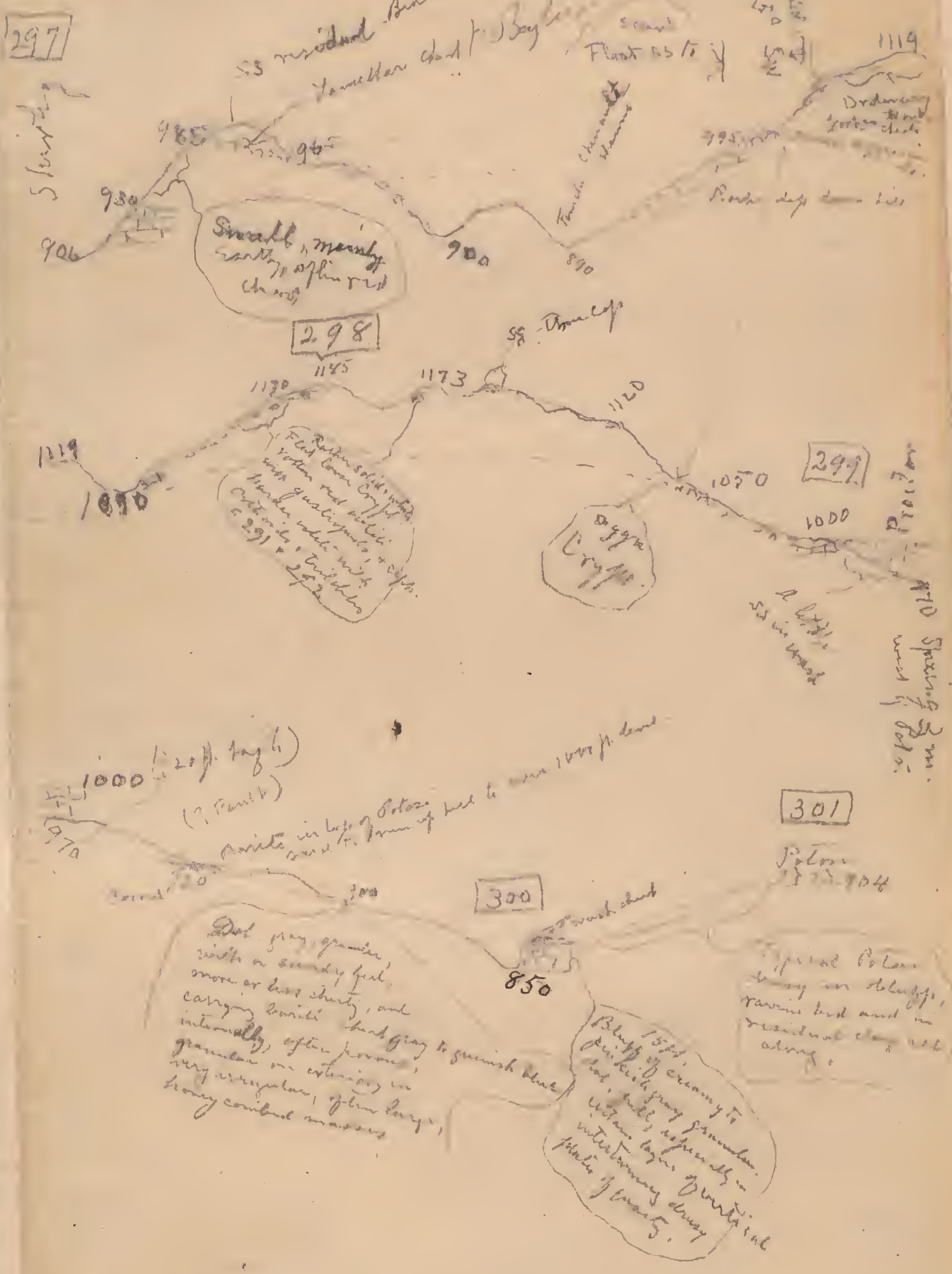
294. The chert at this point though unquestionable Roub., has a strange look, a part of it clearly enough suggests Boylers but most of it is a small pebbled congl. Between 770 and 800 large congl. chert blocks occur locally in considerable abundance. Between 800 & 820 the flat Crypt. & not very well characterized stringy cherts come in. These former contain some quartz. (Small forms) but more important are an Orchard and Emmerance dol. fossils in 294b. Illaenus & other trilobites are abundant east & north of Fredericktown. The same trilobites occur here in a massive, dense white chert just like those found at Mine la Motte. No typical Potosi drusy occurs here. That horizon is beneath beds exposed.

The fine white chert seems to come in just above base of Roub. No Quartz. ss. - Roub. thinning from west.



Add 240 to alt. of d. ...

Steel wire to Potosi cont.



297

298

299

300

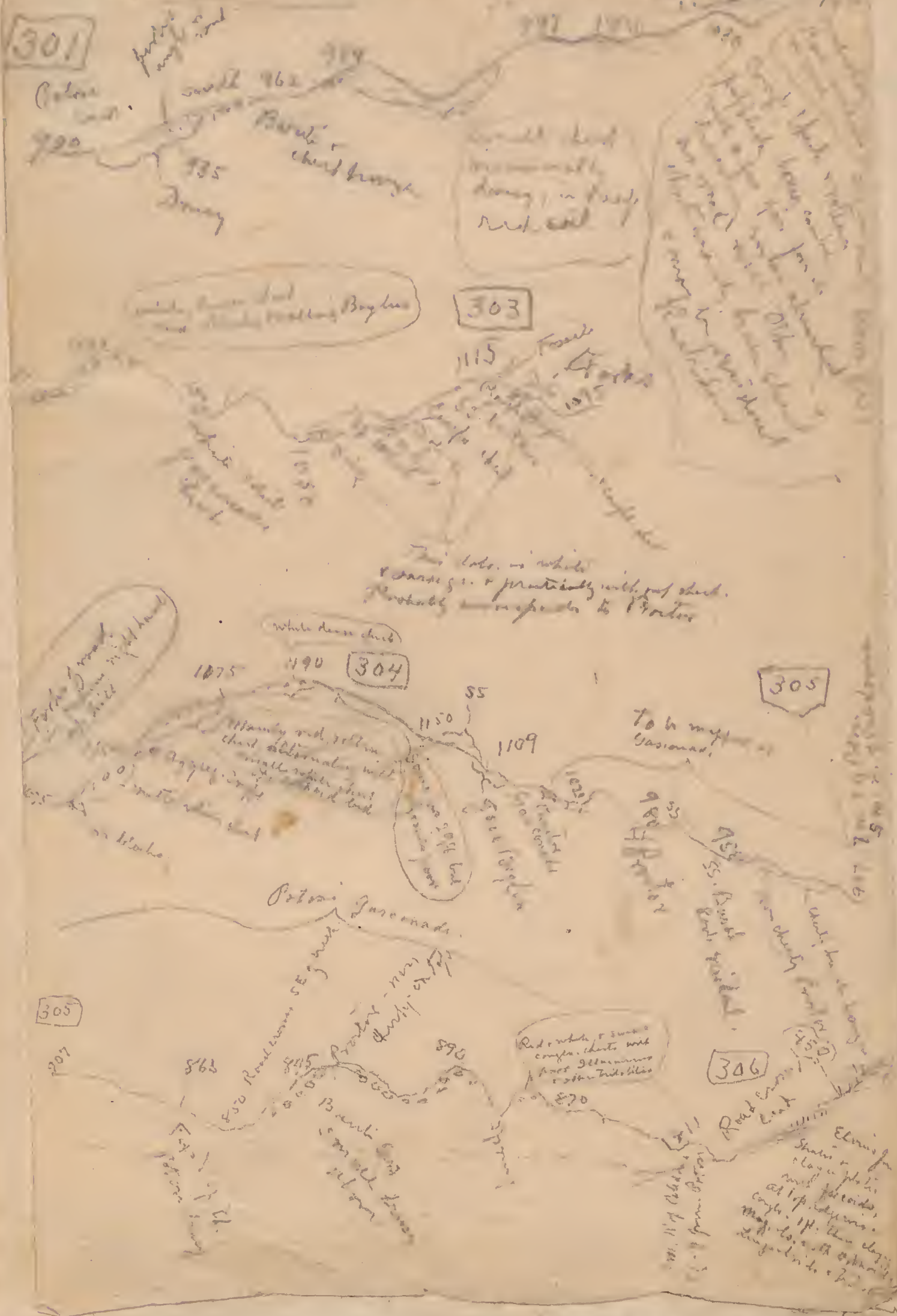
301

Dot gray granular with a sandy feel, more or less cherty, and carrying small chert nodules, often porous, granular on exterior, very irregular, often large, honey combed masses.

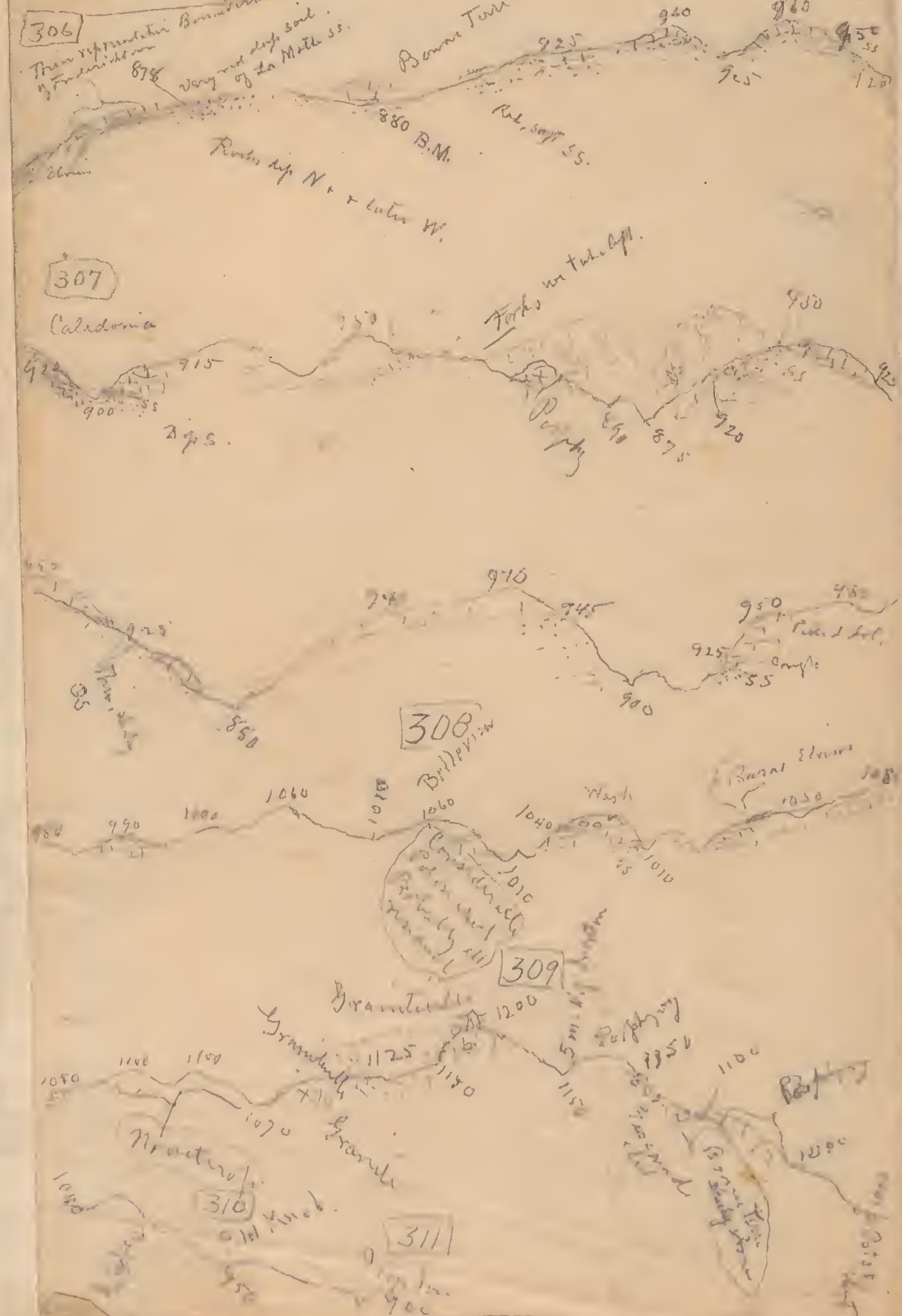
Bluffs of cream to pinkish gray granular chert, upperly - interesting chert plates of beauty.

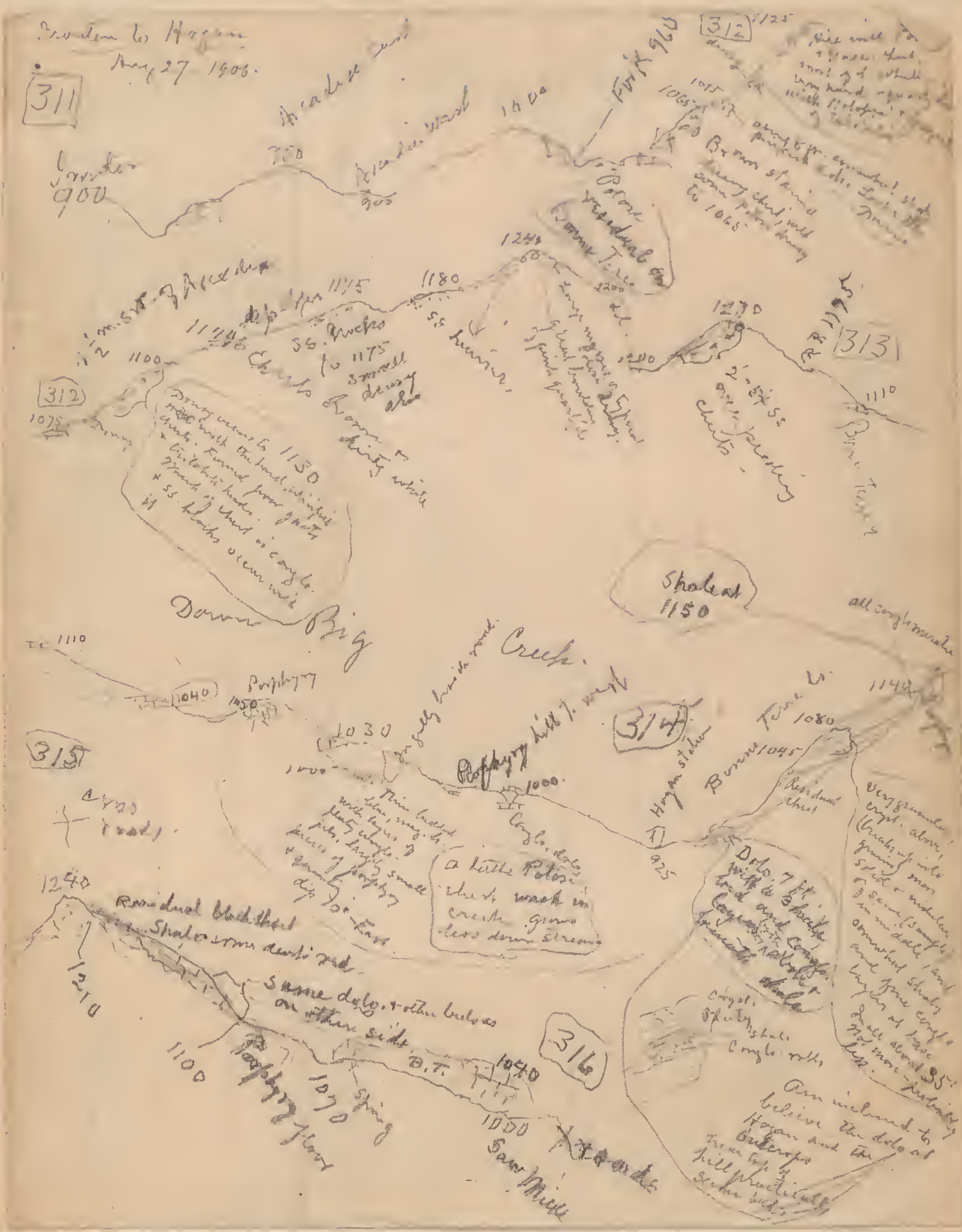
Typical Potosi chert on bluffs, narrow bed and in residual clay soil along.

Potosi to Juncos 1

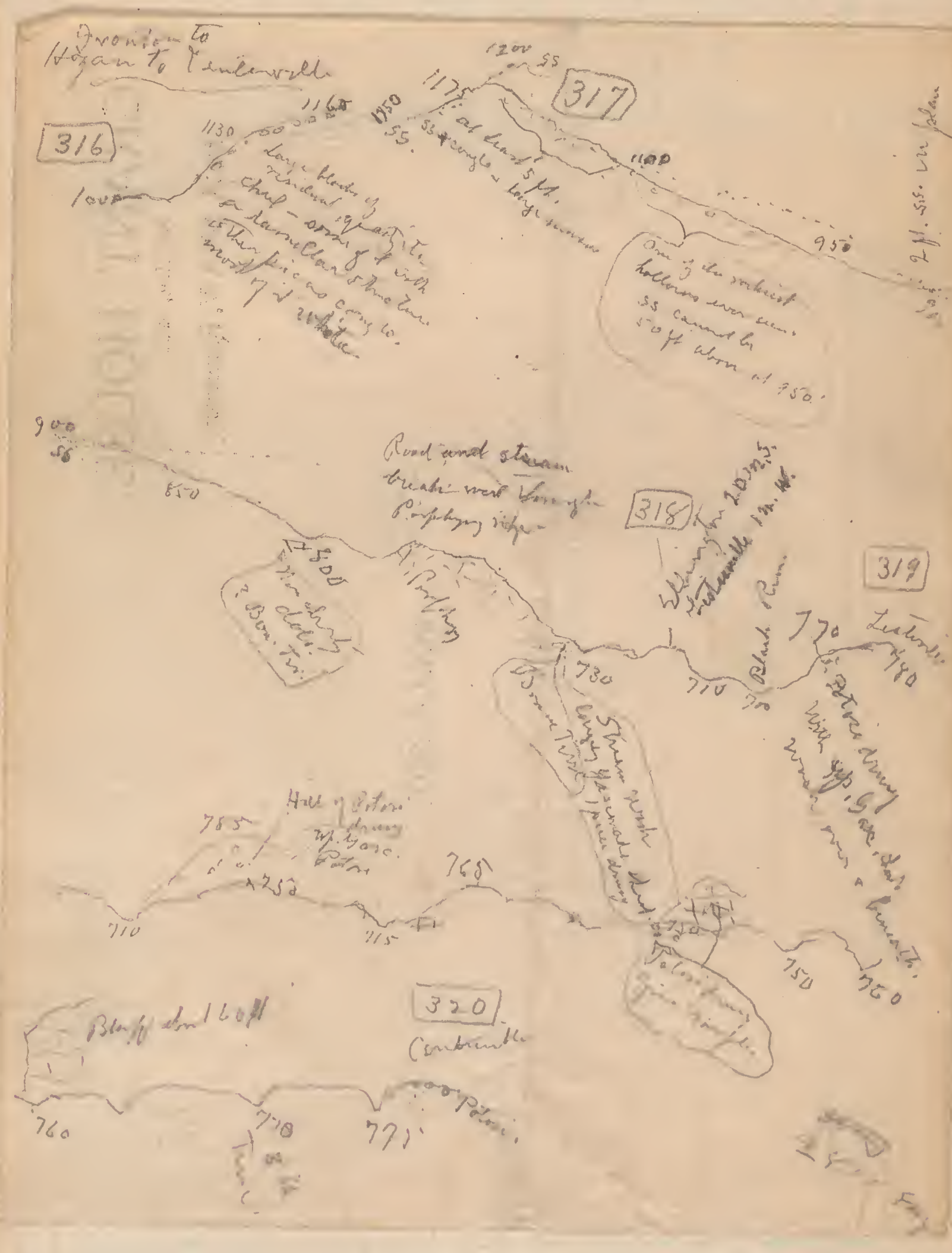


Potosi to Juncos 2



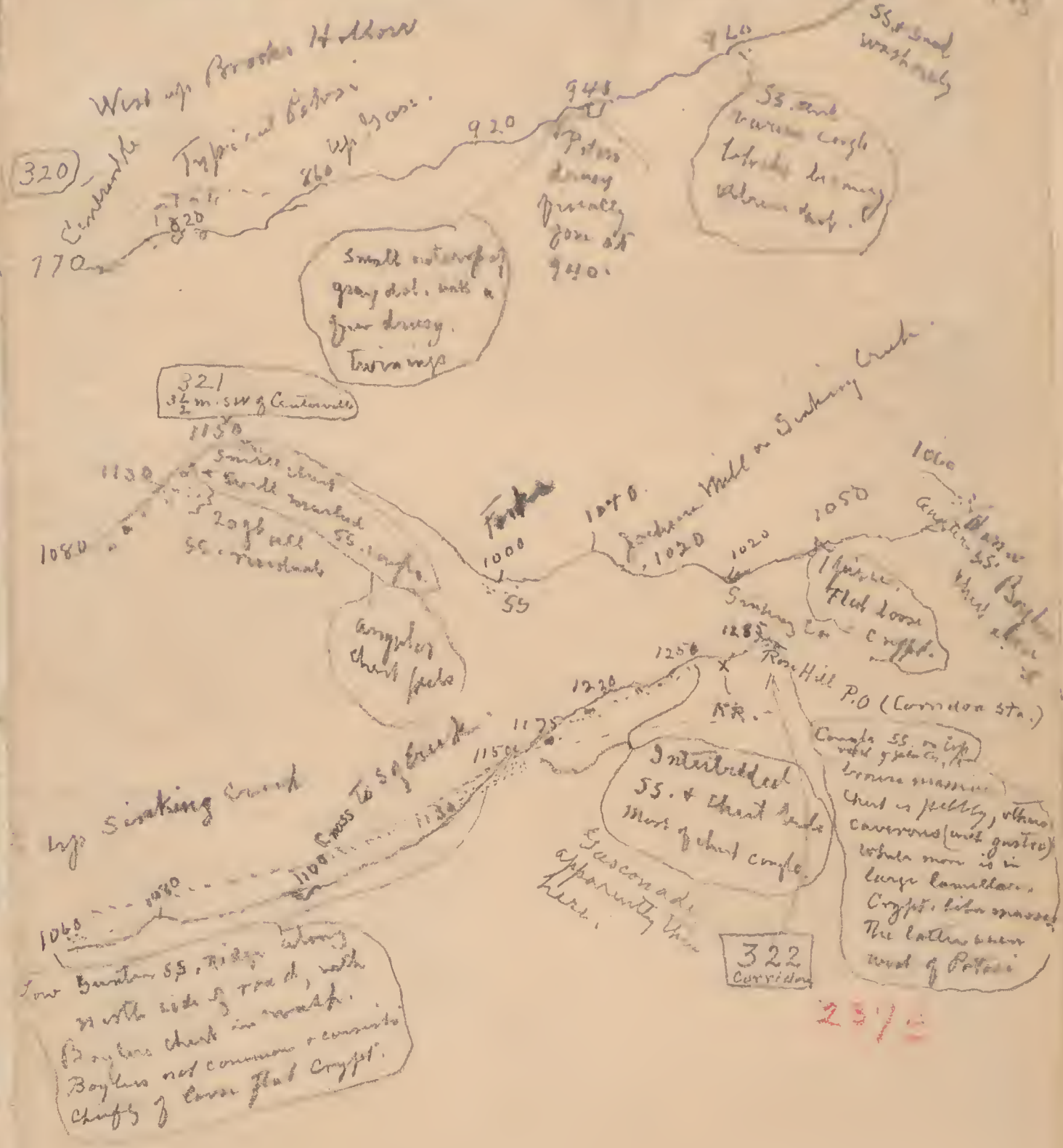


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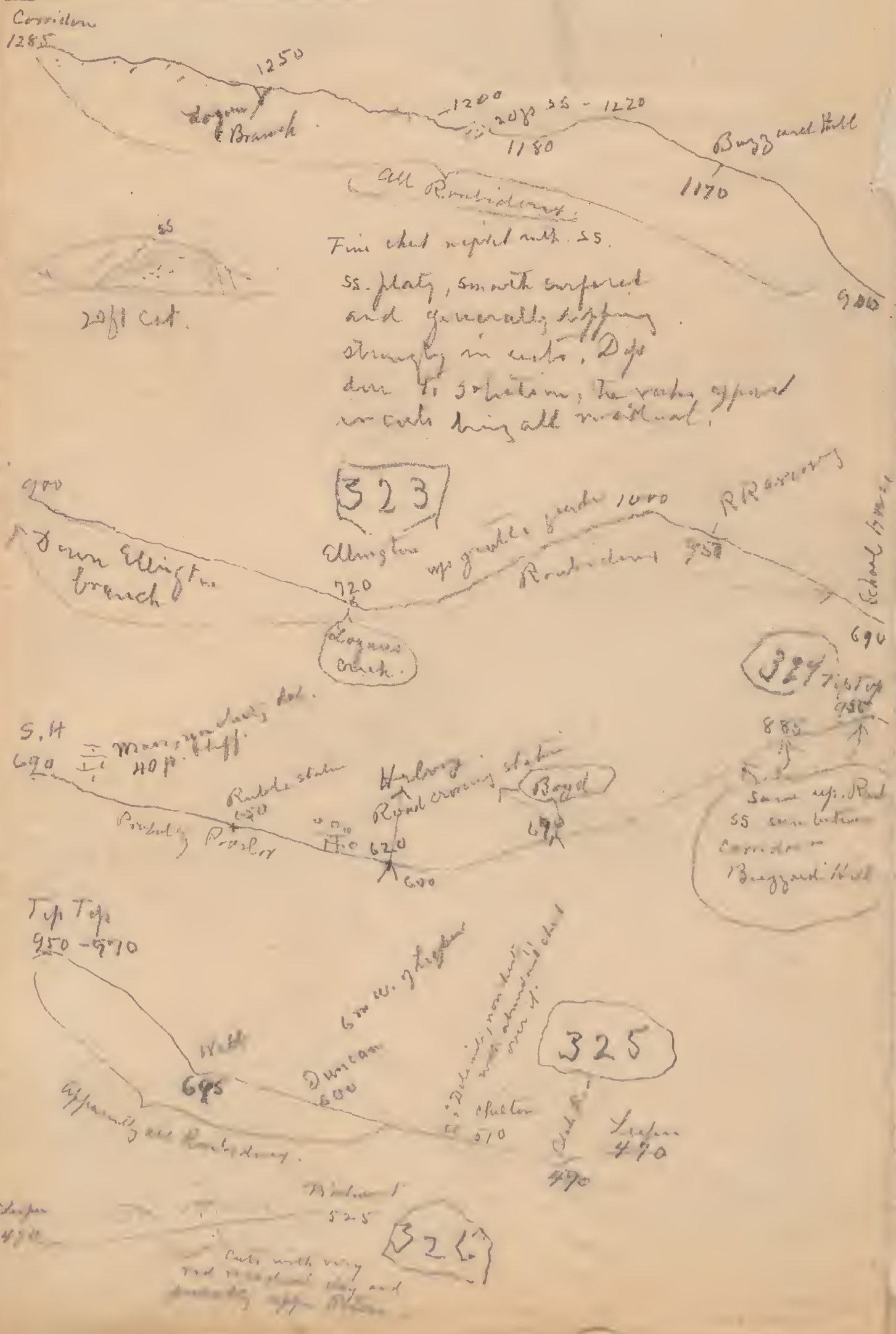
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Centerville, SW to Rose Hill P.O. on Mo. South R.R.
Aug. 28 - AM.



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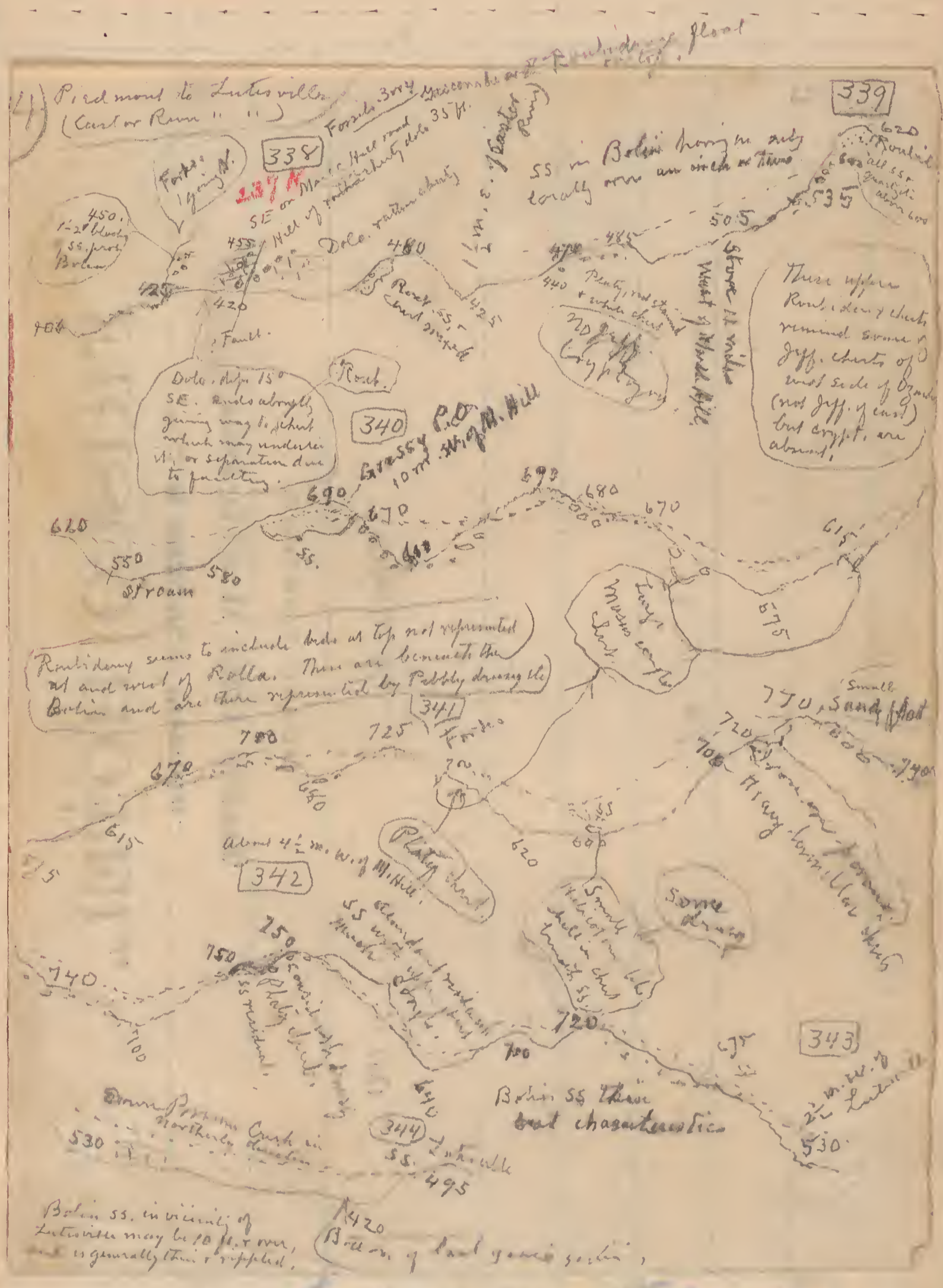
Aug. 28, 1906 - P.M.
Corridor or Rose Hill to Looper.





2370

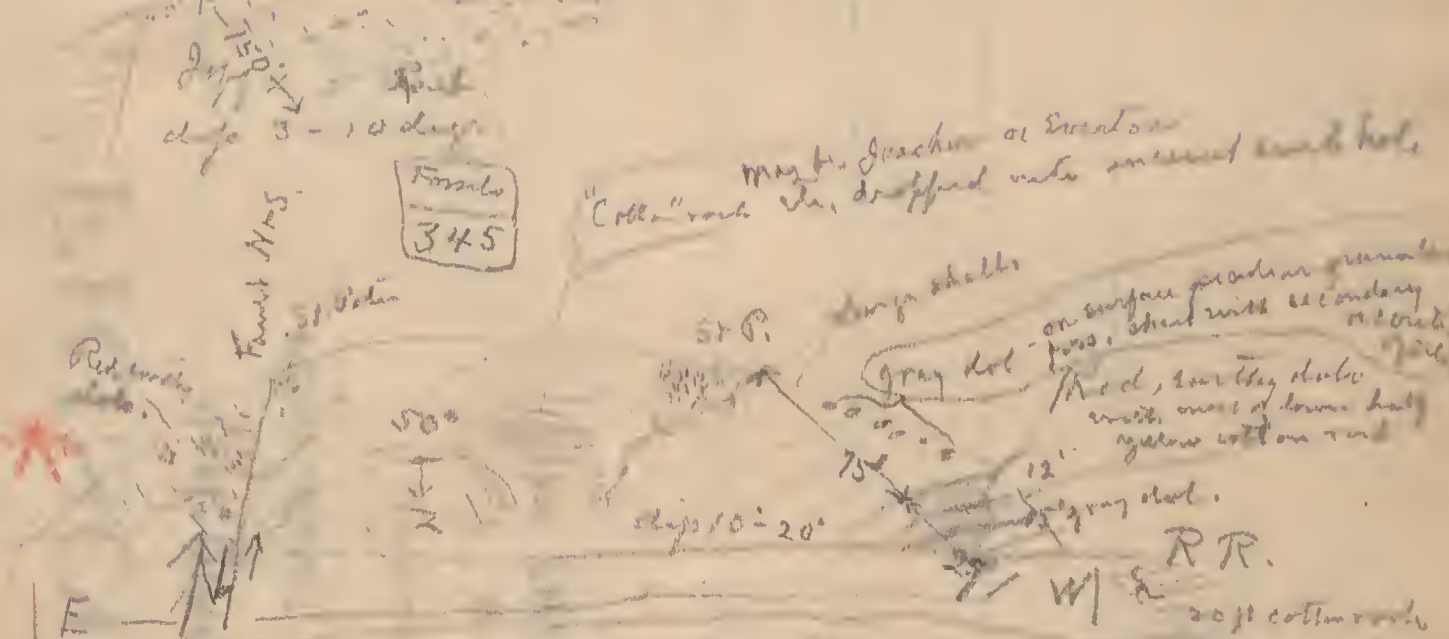
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5 - Pikesburg to Lutesville Aug 30, 1906

Lutesville. Rocks dip east at Lutesville bearing Jeff



Broken ground contains masses of ^{dislocated} *Reminiscens* ls., *Ferris* ls., *Plattin* ls., hard, platy *laminis*, (? *laminis*) type of *Maguocheta* shale, blocks of massive and platy St. Peter, and Mississippian *crinoidal* chert. Also a boulder made up of 4 or 5 partly separate 4-6" Jeff. *Cryptozoa*. Fault passes northward through Marble Hill.

Structures south of Lutesville

Cherts in this Jeff. are ball like with *L. bygonia*, or *bygonia* gray to red and generally porous, with the outer surface and large cavities showing small nearly acutiform of secondary silicification. On whole cherts much less than in *Plattin* and outcrops of *laminis* much more common. Jeff. City ls. exposed in vicinity of Lutesville estimated at not less than 150 ft.

1. Lutesville To Cape Girardeau Aug. 31 ³⁴⁶ ₄₉₅ 1 m. 2 of N.P. 500

(A) *Ferris* ls., *Reminiscens* ls., *Plattin*, *Maguocheta*, St. Peter 720
 34 *Mississippian crinoidal* ls. + *Jeff. Cryptozoa*
 4 *Canadian*

42
 66
 m. E
 410

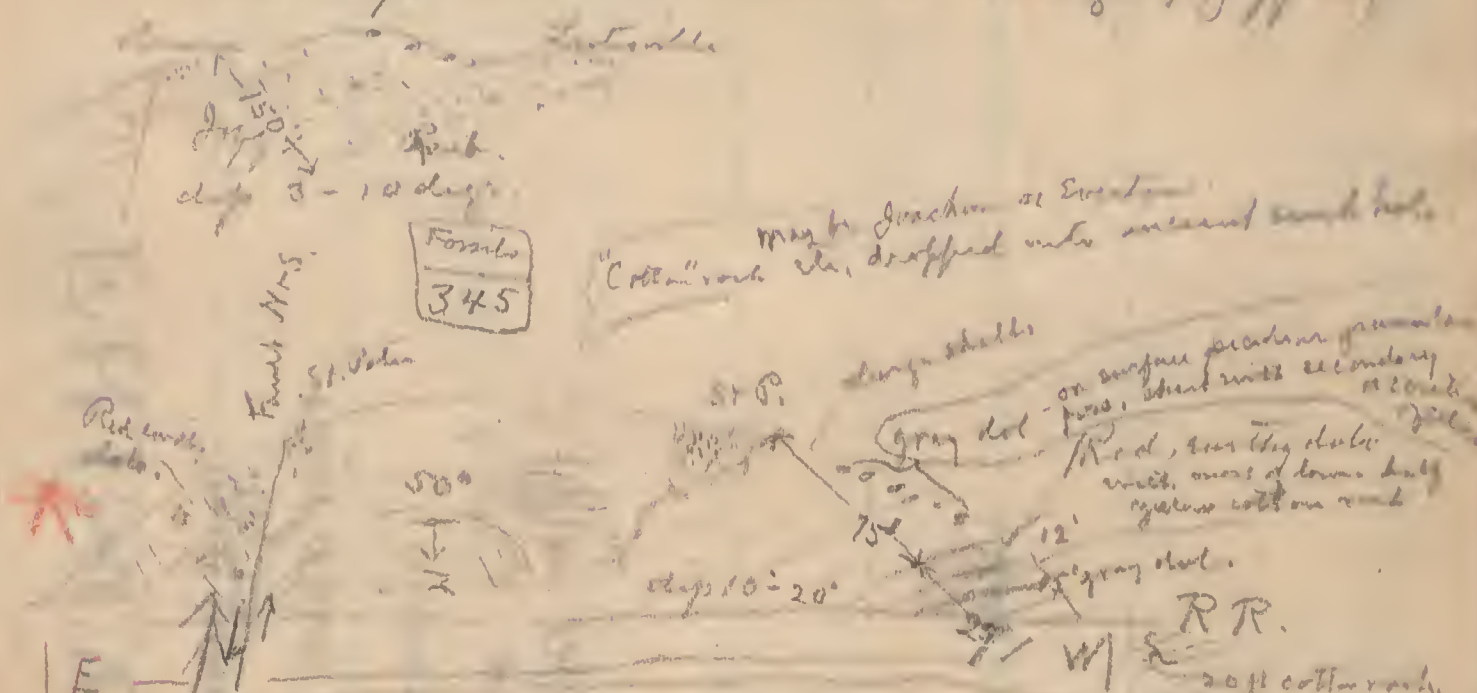
cont on next page

Farmdale,
Kingswick, Plattsburgh, Maguocheta, St. Peter
Mississippians considered her, & upped
Canadian.

5 - Portland to Lutesville

Aug 30, 1906

Planks dips east at Lutesville from Jiffy



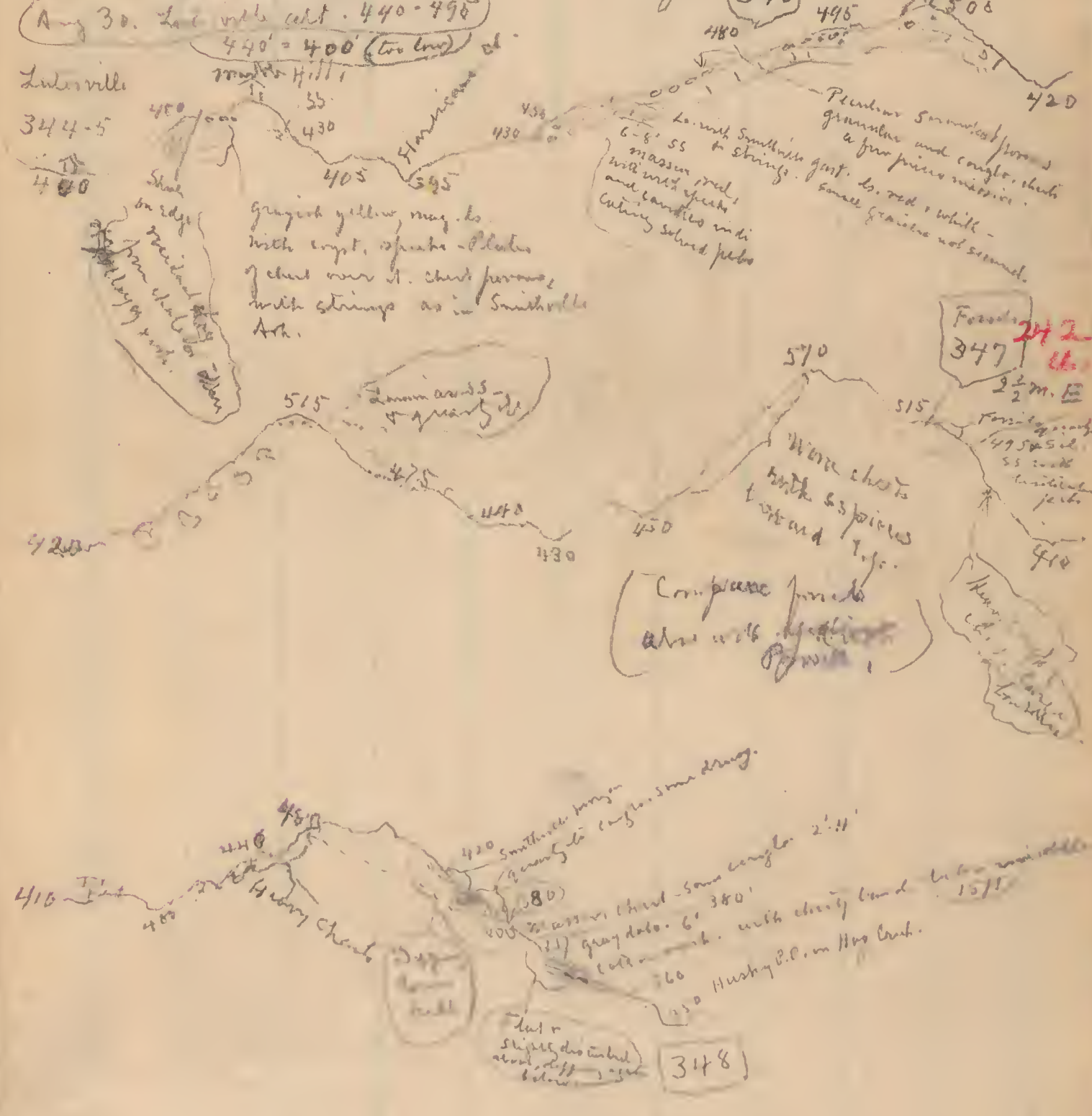
Broken ground containing dislocated masses of *Rennellia* ls., *Ferrule* ls., *Plattin* ls., hard, platy laminae, (? losing) type of *Maquoketa* shale, blocks of massive and platy St. Peter, and Mississippian crinoidal chert. Also a boulder made up of 4 or 5 partly separate 4-6" Jiffy *Cryptozoa*.
 Fault passes northward through Marble Hill.

Structure South of Lutesville

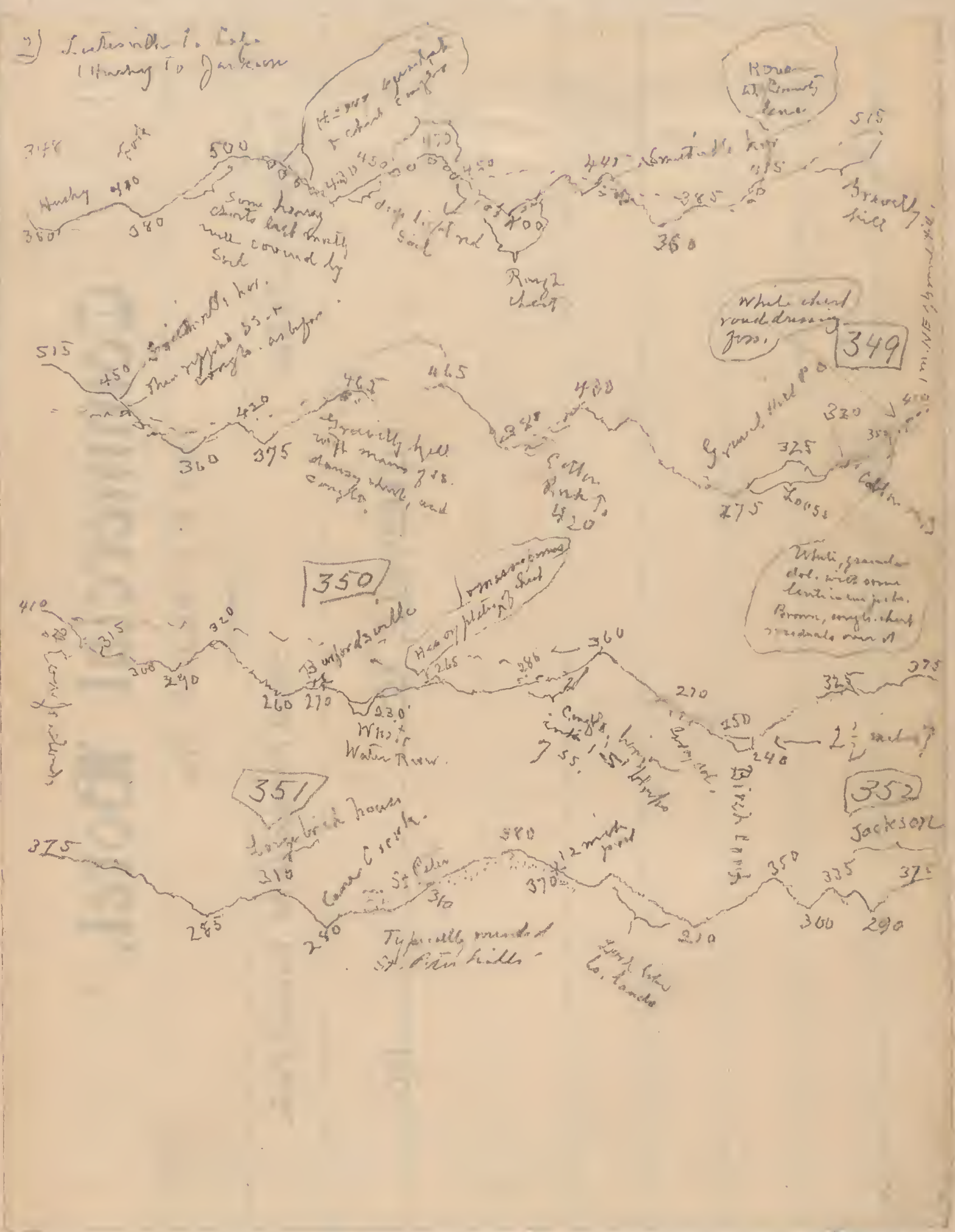
Cherts in this Jiffy are both thin with a granular, or ~~gray~~ gray to red and generally porous, with the outer surface and large cavities showing small warty accretions of secondary silicification. On whole cherts much less than on *Houbert* and outcrops of limestone much more common. Jiffy City ls. exposed in vicinity of Lutesville estimated at not less than 150 ft.

1. Lutesville To Cape Girardeau

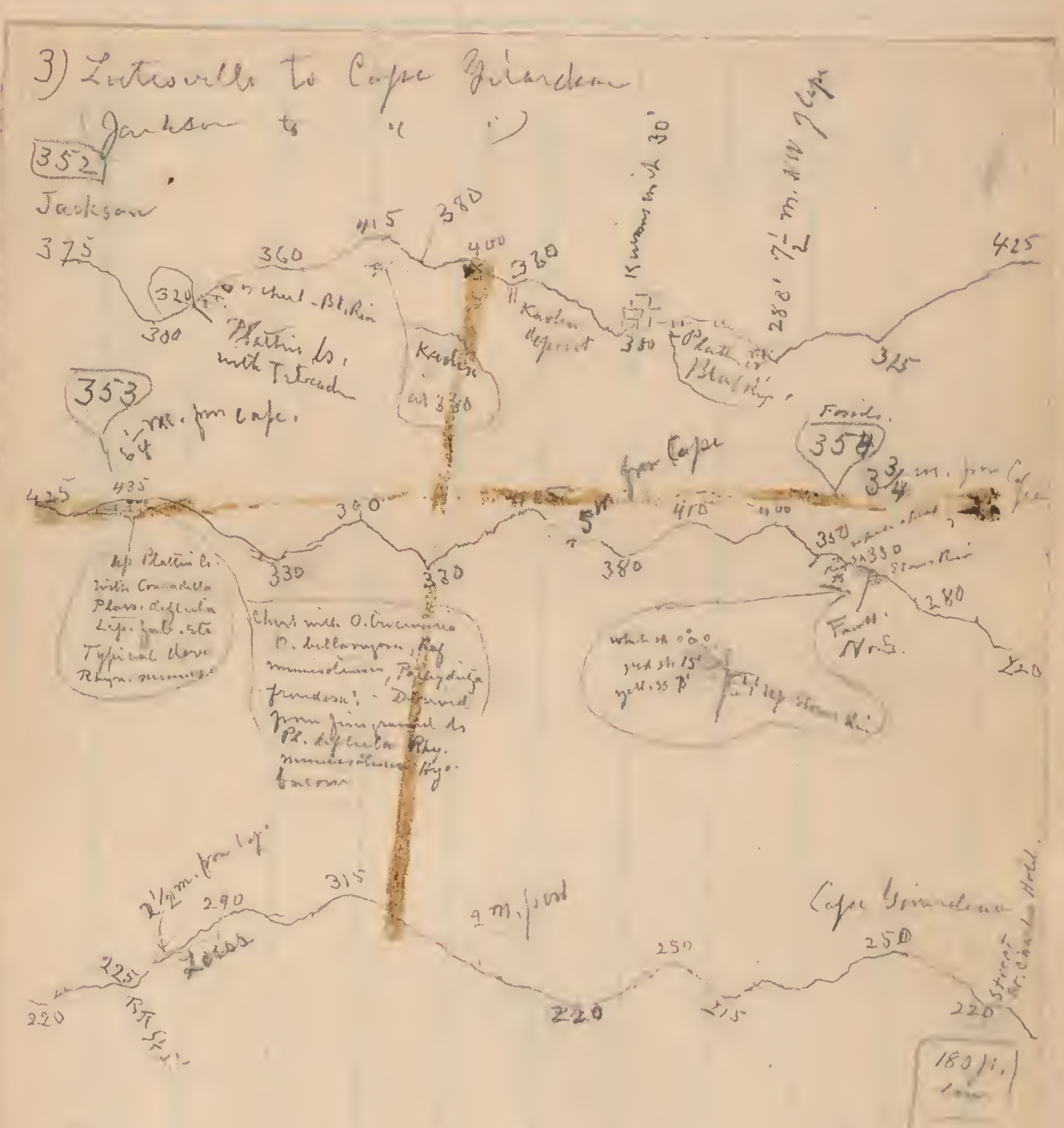
Aug 31



cont on next page.



Continued on next page



Aug 31, 1906

(Probably started our 100 ft bar at Lutesville.)

(680 miles continuous section this month)

Continued section from Station 274 (page 13) to 354 Station = 18081
p. 13 to 37. 37

Blank pages.

DATE	DESCRIPTION	AMOUNT
1890		
1891		
1892		
1893		
1894		
1895		
1896		
1897		
1898		
1899		
1900		

Blank ledger page with a faint grid pattern.



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Berryman, Huzzah Creek to, 20 miles west of Potosi = Loc.292 (Steelville to Potosi)	20
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In description of Buckley farm	7
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at Loc.277 (Rolla to Steelville)	13
at Loc.279 (1 mile S. of St. James)	14
at Loc.280 (Big Dry Fork, 3 miles S. of St. James)	14
at Loc.280 (Rolla to Meramec Sprs.)	15
at Loc.283 (Rolla to Steelville)	16
at Loc.288 (Patsey P.O., Cherry Valley railroad crossing, 6 miles E. of Steelville)	18
at Loc.289 (Steelville to Potosi)	19
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at Locs.243,244 (in vicinity of Lutesville)	33
Bonneterre ls.:	
mentioned	3
at Loc.306 (Potosi to Ironton)	25
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Bonmeterre ls.:

- at Loc.313 (near Big Creek) 26
- at Loc.314 (Hogans Station) 26
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to Centerville) 27

Boone chert:

- in sketch of north slope near School
of Mines, Rolla 11
- at Loc.280 (Big Dry Fork, 3 miles
south of St. James) 14

Boyd - between Locs.323,324 (Ellington to Tiptop) 29

Boylers chert:

- at Loc.280 (Big Dry Fork, 3 miles
S.of St. James) 14
- at Loc.282 (Meramec Springs Hotel),
Rolla to Meramec Springs 15
- at Loc.286(first hill west of Steel-
ville) 18
- at Locs.289,290(Steelville to Potosi)19
- at Loc.294(up Lost Creek, Steelville
to Potosi) 21
- at Loc.297(8 miles west of Potosi) 21
- at Loc.303 (Potosi to Ironton) 24
- at Loc.322 (Rose Hill P.O. or Corri-
don Sta.) 28

Brick house near Cane Creek = Loc.351 36

Brooks Hollow, west up toward Centerville =
Loc.320 28

Buckley E.R. - farm of, northeast of Rolla . . . 7-9
hill north of home of =
Loc.274 - Rolla to Steelville 13

Burfordville, near Whitewater River = Loc.350 . . 36

Buzzard Hill, at Loc.322 (Rose Hill or Corridon
to Leeper) 29

Caledonia, 5 miles north of = Loc.305 (Potosi to Ironton)	24
Cane Creek, large brick house near = Loc.351	36
Cape Girardeau:	
Lutesville to = Locs.334-354	34-37
6 $\frac{1}{2}$ miles from = Loc.353	37
3 $\frac{3}{4}$ miles from = Loc.354	37
Carboniferous:	
in sketch of north slope near School of Mines, Rolla	11
in sketch, Rolla to Steelville	14
Castor River, near = Loc.336	32
Centerville - Ironton to Hogan, to = Locs.316-320	27
= Loc.320	27
3 $\frac{1}{2}$ miles SW. of = Loc.321	28
to Rose Hill P.O. on Mo.S.R.R. = Locs.320-322	28
Cherry Valley spur, railroad crossing at - Patsey P.O., 6 miles E. of Steelville = Loc.288	18
Chilton, near Loc.325 (Leeper)	29
Clarks Creek, between Locs.327,328 (4 miles E. of Piedmont)	30
Clays at Versailles in Lincoln R.k.cut and at Fristoe - compare with clays NW. of Rolla - on Dr. Buckley's farm	7
Clubb P.O., 5 miles E. of Bounds = Loc.334	32
Clubb, 1 mile NE. of = Loc.335	32
Cole Camp or Bolin ss. - in section	3
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Corridon Station - Rose Hill P.O. = Loc.322 . . .	28
Corridon or Rose Hill to Leeper = Locs.322- 325	29
Cotaway Fourche a Courrois Creek at Loc.293 (Berryman to Potosi)	21
Cotaway Creek, at Loc.293(Berryman to Potosi) .	20
Courrois Creek, Cotaway Fourche a - Loc.293, (Berryman to Potosi)	21
Cryptozoan, Jefferson - at Loc.335(south of Lutesville)	35
Dillon = Loc.276 (Rolla to Steelville) . . .	13
2 miles east of = Loc.277	13
Dry Creek, section in bluff on - Steelville to Potosi (+ slip 4, under side).	19
Duncan, between Locs.324,325 (Tiptop to Leeper)	29
Ellington, 20 miles south of = Loc.318 . . .	27
Ellington = Loc.323	29
Elvins, basal at Loc.308 (Belleview - Potosi to Ironton)	25
Elvins formation at Loc.306 (3 miles north of Caledonia - Potosi to Ironton)	24
Eminence fossils at Loc.294 (up Lost Creek - Steelville to Potosi)	21
Everton of Marion County series - thickness of	2
Fernvale ls. at Loc.335 (south of Lutesville) .	34
Fourche Chenault near Loc.298 (Steelville to Potosi)	22
Fredericktown - trilobites procured east and north of at Loc.294 (up Lost Creek, Steel- ville to Potosi)	21
Fristoe and Lincoln cut at Versailles - clay at - compare with clay on Dr. Buckley's farm, northwest of Rolla	7

Gasconade and Meramec rivers - in description of Dr. Buckley's farm	7
Gasconade, Roubidoux, and Jefferson - section of	3
Gasconade:	
of Niangua chert group or series - thickness of	2
at Locs.309,310 (Graniteville and Pilot Knob)	25
at Locs.326-333 (Piedmont to Bounds)	30,31
Graniteville = Loc. 309	25
Grassy P.O., 10 miles west of Marble Hill = Loc.340	33
Gravel Hill, 1 mile northeast of = Loc.349 .	36
Greenville - between Locs.334,335(Clubb P.O.)	32
Gunter ss.:	
at Loc.291 (Huzzah Creek, mouth of Dry Creek,10 miles east of Steelville)	20
at Loc.295 (up Lost Creek - Berryman tp Potosi)	21
in section	3
at Loc.327 (2 miles east of Piedmont)	30
at Loc.289 (Steelville to Potosi) . .	19
Hill north of Buckley's house = Loc.274 (Rolla to Steelville)	13
Hog Creek, Husky P.O. on = Loc.348	35
Hogan Station = Loc.314	26
Hogan, Ironton to, to Centerville = Locs.316- 320	27
Hollows, one of the rockiest ever seen = Loc.317 (Ironton to Hogan,to Centerville)	27
Hurricane Creek at Loc.335 (south of Lutes- ville)	35
Husky P.O., on Hog Creek = Loc.348	35

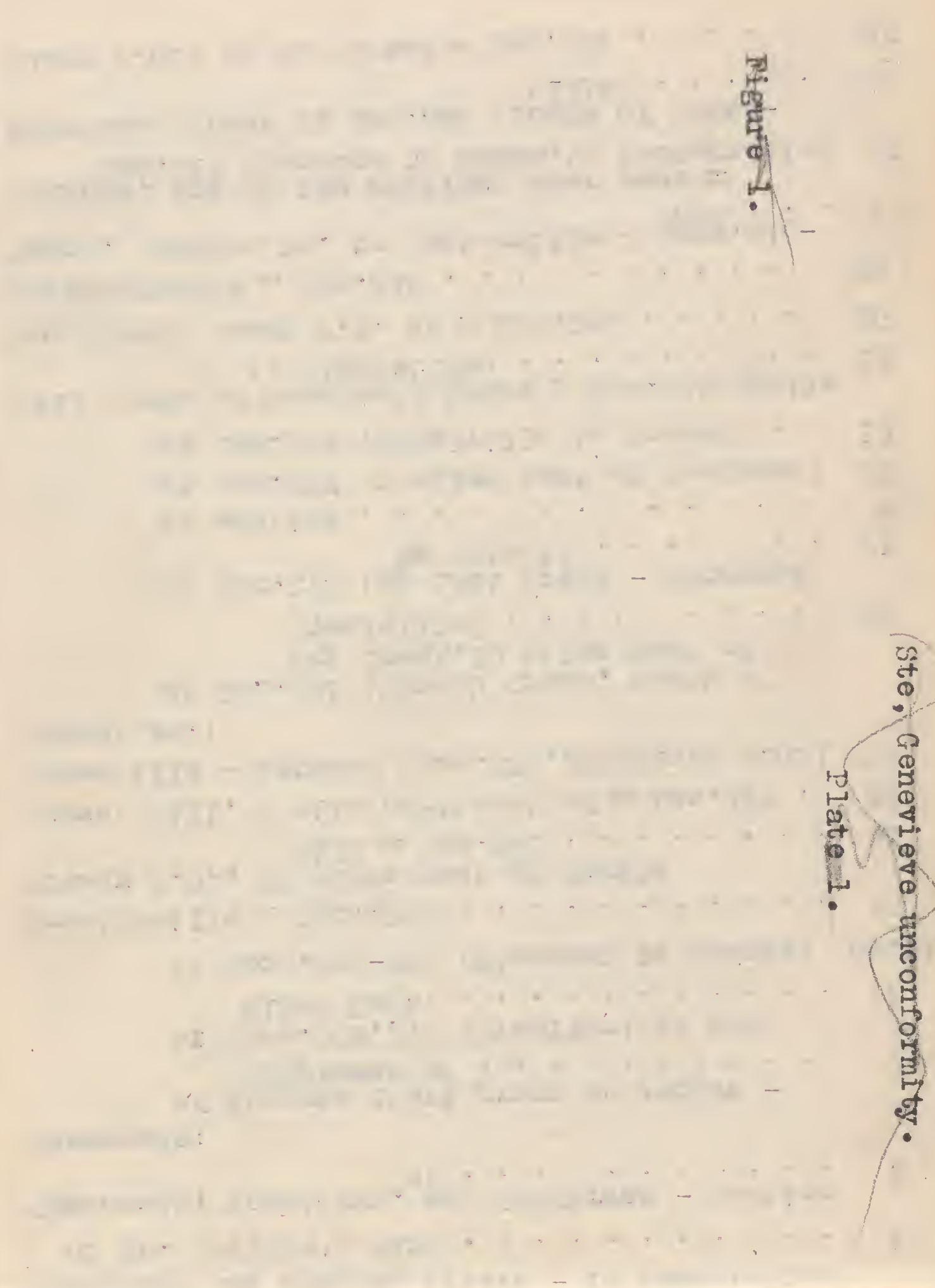


Figure 1.

LEGENDS FOR TWO PLACES SHOWING UNCONFORMITY

Ste. Genevieve unconformity.
Plate 1.

Husky to Jackson = Locs.348-352	36
Huzzah Creek, mouth of Dry Creek, 10 miles east of Steelville = Loc.291	20
Huzzah Creek to Berryman, 20 miles west of Potosi = Loc.292	20
Iron ore bank, Meramec = Loc.281	15
Iron prospect - Rolla to Steelville - near Loc.276	13
Ironton = Loc.311	25
Ironton to Hogan	26
Ironton to Hogan, to Centerville = Locs.316-320	27
Itinerary of Ozark trip	1
Jackson = Loc.352	36
Jackson, Husky to = Locs.348-352	36
Jefferson, basal, at Loc.277(Rolla to Steelville)	13
Jefferson at Loc.344 (Lutesville)	34
Jefferson cryptozoan at Loc.335 (south of Lutesville)	35
Jefferson, Roubidoux, and Gasconade - section of	3
Jefferson of Niangua chert group or series - thickness of	2
Jefferson cotton rock in sketch of north slope near School of Mines, Rolla	11
Kaolin deposit at Loc.352 (Jackson)	37
Kimmswick ls.:	
at Loc.335 (south of Lutesville)	34
near Loc.352 (Jackson)	37
La Motte ss.:	
mentioned	2
near Loc.306 (Potosi to Ironton)	25
Leeper - Rose Hill or Corridon to = Locs.322-325	29
Leeper = Loc.325	29

23. View of the left side of a well-preserved but rather

Lesterville = Loc.319 27

Localities:

- 274 - hill north of Buckley house -
Rolla to Steelville 13
- 277 - 2 miles east of Dillon 13
- 276 - Dillon - Rolla to Steelville 13
- 278 - St. James - Rolla to Steelville 14
- 279 - 1 mile south of St. James 14
- 280 - Big Dry Fork, 3 miles south of
St. James 14
- 281 - Meramec iron ore bank - Rolla to
Meramec Springs 15
- 282 - Meramec Springs Hotel 15
- 285 - 3 miles west of Steelville - Rolla
to Steelville 15
- 286 - first hill west of Steelville on
Meramec Springs road 16
- 287 - Rocky Hollow - Steelville to Potosi 18
- 288 - R.R.crossing, Cherry Valley spur,
6 miles east of Steelville, Patsey
P.O. - Steelville to Potosi 18
- 291 - Hill going east down Huzzah Creek,
mouth of Dry Creek, 10 miles east
of Steelville 20
- 292 - Huzzah Creek to Berryman, 20 miles
west of Potosi 20
- 293 - 2/3 mile west of Cotaway Creek 20
- 294 - Up Lost Creek - Steelville to
Potosi 21
- 295 - Up Lost Creek - Berryman to
Potosi 21
- 297 - 8 miles west of Potosi - Steelville
to Potosi 21
- 299 - Spring 3 miles west of Potosi 22
- 300 - Potosi 22
- 301-311 - Potosi to Ironton 24
- 306 - 3 miles north of Caledonia, 8 miles
from Potosi 24

differences between the three sequences are such as were natural

Localities:

308 - Belleview (Potosi to Ironton)	25
309 - Graniteville	25
310 - Pilot Knob	25
311 - Ironton	25
312 - 3½ miles southwest of Arcadia	26
313 - down Big Creek	26
314 - Hogan Station	26
316 - Cross roads near saw mill	26
316-320 - Ironton to Hogan, to Centerville	27
317 - rockiest hollow ever seen	27
318 - 20 miles south of Ellington	27
319 - Lesterville	27
320 - Centerville	27
321 - 3½ miles southwest of Centerville	28
322-325 - Rose Hill or Corridon to Leener	29
323 - Ellington	29
324 - Tiptop	29
325 - Leener	29
326-345 - Piedmont to Lutesville	30-34
326 - Piedmont to St. Francis River	30
327, 328 - east of Piedmont	30
329 - Patterson	30
330 - near McCormick ford of St. Francis River	30
333 - 1½ miles east of Bounds	31
334 - Clubb P.O., 5 miles east of Bounds	31
335 - 1 mile northeast of Clubb	32
336 - near Castor River	32
338 - southeast on Marble Hill road	33
339 - near store, 11 miles west of Marble Hill	33
340 - Grassy P.O., 10 miles west of Marble Hill	33
342 - 4½ miles west of Marble Hill	33
338-344 - Piedmont to Lutesville	33
343 - 2½ miles west of Lutesville	33
344 - Lutesville	33

Localities:

348 - Husky P.O. on Hog Creek	35
350 - Burfordville, near Whitewater River	36
352 - Jackson	36
353 - $6\frac{1}{2}$ miles from Cape Girardeau	37
354 - $3\frac{3}{4}$ miles from Cape Girardeau	37
Logan Branch at Loc.322	29
Logan Creek at Loc.323 (Ellington)	29
Lost Creek, up = Loc.294 (Steelville to Potosi)	21
Lutesville: Piedmont to = Locs.326-345	30-34
$2\frac{1}{2}$ miles west of = Loc.343	33
= Loc.343	33
to Cape Girardeau = Locs.334-354	34-37
McCormick ford of St. Francis River = Loc.330	30
Maquoketa shale at Loc.335 (south of Lutesville)	34
Marble Hill: 20 miles west of = Loc.336	32
SE. on road = Loc.338	33
11 miles W. of = Loc.339	33
$4\frac{1}{2}$ miles west of = Loc.342	33
Masses, sandstone, near Rolla - may be of Penn- sylvanian or Mississippian age	11
Meramec and Gasconade rivers - in description of Dr. Buckley's farm	7
Meramec iron ore bank = Loc.281 (Rolla to Mera- mec Springs)	15
Meramec River (Rolla to Meramec Springs) = Loc. 282	15
Meramec Springs - Rolla to Steelville via	13-17
Meramec Springs chert, top of - at Loc.284 (Rolla to Steelville)	15
Meramec Springs fossil horizon - at Locs.285, 286 (Rolla to Steelville)	16
Meramec Springs horizon 40-50 feet above ls. at Loc.292 (Kuzzah Creek to Berryman, 20 miles W. of Potosi)	20
Meramec Springs Hotel = Loc.281 (Rolla to Meramec Springs)	15

Mississippian or Pennsylvanian age - sandstone masses near Rolla may be of	11
Mississippian crinoidal chert at Loc.335 (south of Lutesville)	35
Niangua chert group or series - Jefferson, Roubidoux, and Gasconade - thicknesses of . . .	2
Ozark region - action of Committee on Geologic Names - list of names by Miss Wilmarth . . .	front cover
Ozark trip - itinerary of	1
Patsey P.O., 6 miles east of Steelville, railroad crossing at Cherry Valley spur = Loc.288 . . .	18
Patterson = Loc.329 (Piedmont to Bounds)	30
Pennsylvanian or Mississippian age - sandstone masses near Rolla may be of	11
Piedmont to Lutesville = Locs.326-345	30-34
Piedmont = Loc.326	30
Possum Creek - near Locs.343,344 (vicinity of Lutesville)	33
Potosi: Steelville to - sketched	18-22
20 miles west of = Loc.292 (Huzzah Creek to Berryman)	20
= Loc.300 (Steelville to Potosi)	22
to Ironton = Locs.301-311	24
Potosi chert:	
at Loc.308 (Belleview, Potosi to Ironton)	25
between Locs.309,310 (Graniteville and Pilot Knob)	25
drusy at Locs.316-320 (Ironton to Hogan, to Centerville)	27
upper, at Loc.328 (east of Piedmont)	30
Potosi group or series - mentioned	2
Pilot Knob = Loc.310	25
Plattin ls. at Loc.335 (south of Lutesville)	34
Plattin or Black River near Loc.352 (Jackson)	37

PROCTOR IS.:

in section	3
in section at Loc.291 (Huzzah Creek, mouth of Dry Creek, 10 miles east of Steelville)	20
at Loc.295 (up Lost Creek, Berryman to Potosi)	21
at Loc.299 (spring 3 miles west of Potosi)	22
at Loc.305 (5 miles north of Caledonia, Potosi to Ironton)	24
Reefs - probably Mississippian or Pennsylvanian accumulation - sketch of in description of Dr. Buckley's farm	7
Rocky Hollow = Loc.287 (Steelville to Potosi)	18
Rocky hollow (one of the rockiest ever seen) = Loc.317 (Ironton to Hogan, to Centerville)	27
Rolla to Steelville, via Meramec Springs . .	13-17
Rolla - Dr. Buckley's home northeast of de- scribed	7-9
Rolla - sketch and description of north slope of ridge just north of School of Mines . .	11
Rose Hill or Corridon to Leeper = Locs.322-325	29
Rose Hill P.O. (Corridon Sta.) = Loc.322 . . .	28
Rose Hill P.O., Centerville to, on Mo.S.R.R. = Locs. 320-322	28
Roubidoux:	
in description of Dr. Buckley's farm .	7
in sketch of north slope near School of Mines, Rolla	11
at Loc.277 (Rolla to Steelville) . .	13
near Loc.278	14
at Loc.280 (Big Dry Fork, 3 miles south of St. James)	14
at Loc.286 (first hill west of Steel- ville, Steelville to Potosi)	18

Roubidoux:

at Loc.291 (Huzzah Creek, mouth of Dry Creek, 10 miles east of Steelville) .	20
at Loc.294 (up Lost Creek, Steelville to Potosi)	21
at Loc.298 (near Fourches a Chenault, Steelville to Potosi)	22
at Loc.302 (Potosi to Ironton)	24
at Locs.322-325 (Corridon or Rose Hill to Leeper)	29
at Locs.326-333 (Piedmont to Bounds)	30,31
at Locs.338-344 (Piedmont to Lutes- ville)	33
at Loc.344 (Lutesville)	34
Roubidoux of Niangua chert group or series - thickness of	2
Roubidoux, Jefferson, and Gasconade - section of,	3
Ruble Station between Locs.323,324 (Ellington to Tiptop)	29
St. Charles Hotel, Cape Girardeau - near Loc.354	37
St. Francis series - mentioned	2
St. Francis River, Piedmont to = Loc.326	30
St. Francis River, McCormick ford of = Loc.330,	30
St. James = Loc.278 (Rolla to Steelville)	14
St. James, Big Dry Fork 3 miles south of = Loc.280 (Rolla to Steelville)	14
St. James, 1 mile south of = Loc.279	14
St. Peter: in Marion County series - thickness of	2
at Loc.335 (south of Lutesville)	34
at Loc.351 (brick house near Cane Creek)	36
Sandstone masses near Rolla may be of Pennsyl- vanian or Mississippian age	11
School of Mines, Rolla - sketch and description of north slope of ridge just north of	11

Schoolhouse between Locs.323,324 (Ellington to Tiptop)	29
Saw mill - cross roads near = Loc.316	26
Section in bluff on Dry Creek, near mouth (Steelville to Potosi) (slip 4, under side) . .	19
Section given at Loc.291 (Huzzah Creek, mouth of Dry Creek, 10 miles east of Steelville)	20
Shirley - Loc.297 near (Steelville to Potosi) . .	22
Sinking Creek at Locs.321,322 (Centerville to Rose Hill P.O.)	28
Smithville, Ark. - chert at Loc.335 (south of Lutesville) as at	35
Smithville horizon - between Locs. 348,349 (Husky to Jackson)	36
Steelville, Rolla to, via Meramec Springs road = Loc. 286	16
Steelville: 3 miles west of = Loc.285	15
10 miles east of - hill going east down Huzzah Creek, mouth of Dry Creek = Loc.291	20
Stones River at Loc.354 ($3\frac{3}{4}$ miles from Cape Girardeau)	37
Versailles, clay in Lincoln cut at, and at Fristoe - compare with clay on Dr. Buckley's farm . .	7
Ward, Lee - stopped with - Loc.336 (20 miles west of Marble Hill)	32
Webb, between Locs.324,325 (Tiptop to Leeper) . .	29
Whitewater River, Burfordville near = Loc.350 . .	36
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Yadkins Creek - near Loc.286 (first hill west of Steelville - Steelville to Potosi)	18
Yellville of Marion County series - thickness of .	2

